

BOSTON'S OWN COMPUTER NEWSMAGAZINE

COMPUTER *Currents*

Volume 6 Number 9

MONTHLY

September 1991

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Contest Winners
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COMPUTER SMARTS!

*Special Report on
Training Options*

INSIDE

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Guide

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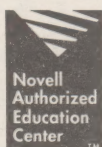
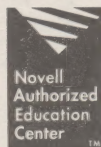
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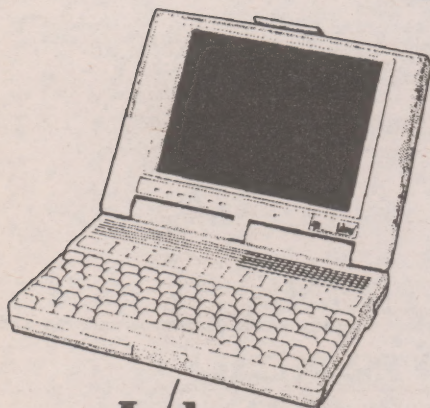
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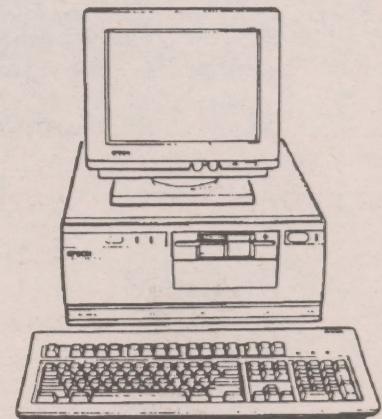
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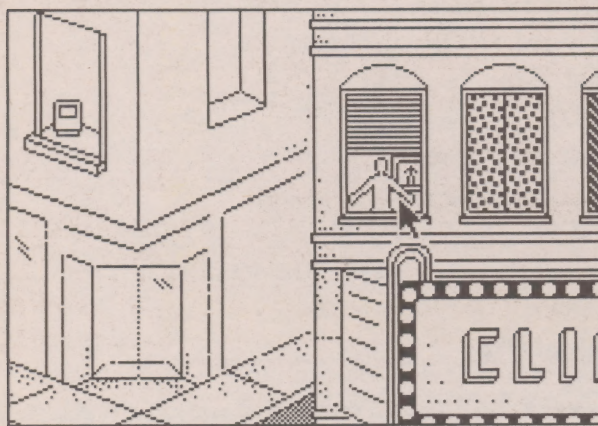
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COMPUTER Currents

VOLUME 6
NUMBER 9
SEPTEMBER 1991

COMPUTER TRAINING

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Whether through training or self-instruction, learning to use a computer — in the long run — represents a large investment. Some people learn best by reading manuals and practicing with the software. Others need professional guidance. In this issue's cover story Larry Magid helps you make the best investment in your training.

By Lawrence J. Magid

LOCAL TRAINERS STANDING BY

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There's probably nothing quite as helpful and reassuring as having someone standing next to you, ready and able to tell you what to do next, or to instantly help you out of a jam. Marguerite Zientara looks at 17 local companies that offer one-on-one training and other alternatives.

By Marguerite Zientara

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Publication Date	Deadline
OCTOBER	SEPTEMBER 16
NOVEMBER	OCTOBER 14
DECEMBER	NOVEMBER 11

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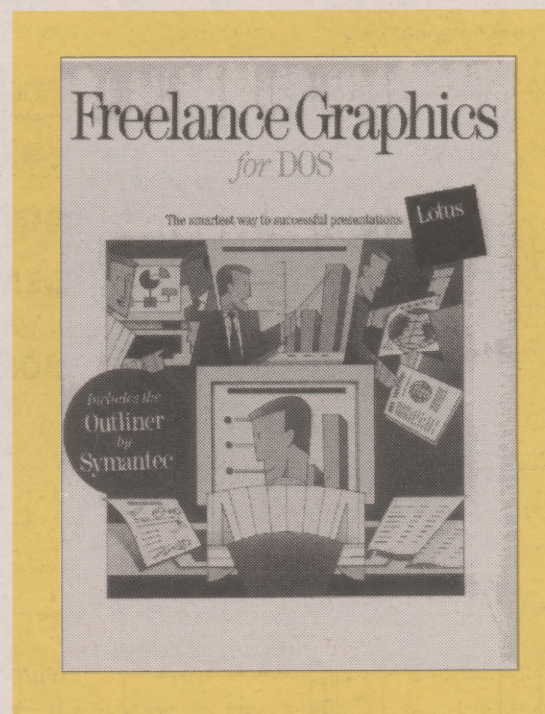
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Has It Really Been Ten Years?



True, it's an awfully short time in the history of an industry, but it's hard to believe it was ten long years ago last month that the first IBM Personal Computer was announced. Of course, it wasn't really the start of an industry since the Apple II, Commodore PET, Radio Shack and scores of other "personal" computers preceded the IBM PC. But in one of the all time great marketing moves, Big Blue be-

came the first company to actually name its microcomputer a personal computer. More importantly, IBM's standing in corporate America virtually legitimized the fledgling industry.

In August of 1981 I had just accepted a job with *InfoWorld*. The PC announcement was big news and created quite a stir among the staff, but nobody predicted IBM would become the standard-setting, industry leader that it quickly became in personal computing. The Apple II was all the rage, and Xerox had recently brought out the Xerox 820, a well-packaged CP/M (the predecessor of MS-DOS) microcomputer. In fact, an *InfoWorld* article quoted several industry leaders scoffing at the technology in the IBM PC as nothing special.

I got ahold of the August 17, 1981 issue of *Computerworld* with the news story of the IBM announcement. The article serves as an interesting time capsule for the reaction to the announcement. For example, one paragraph on the lack of software for the new PC reads, "Apparently in a move to dredge up applications software for the processor, IBM has also gone into the third-party software business..."

Fortunately for IBM, it didn't have to depend on its own software efforts to ensure the success of the PC. A little startup named Lotus Development (okay, not so little; 1-2-3 reportedly cost \$340,000 to develop) and hundreds of others took care of that nicely. And by keeping the hardware of the PC "open" to independent developers (following the lead of the Apple II), IBM spawned an avalanche of add-on products such as hard disks, graphics cards, monitors, and, to its chagrin, PC-compatible "clones."

So That's What's Been

The more important question is, what will the next ten years bring?

You can literally buy hundreds of times more computing power today for the same money you would have paid for those earlier personal computers. That trend is going to continue as chip makers find ways to pack more and more muscle into desktop systems. The 90s are also going to be the decade of portable computers and computing appliances, particularly as accessory and secondary "mobile" devices.

I also think we're going to see real breakthroughs in educational personal computing. In the mid-80s, the home computer and video game markets went through a boom/bust cycle. In the past few years, the video game industry, led by Nintendo, came roaring back to multibillion-dollar sales status. I believe the same thing can happen in the home/education market if there are continued efforts toward innovative software and lower hardware prices. The big news of the last six months has been the computer price wars. It's one war I hope continues.

* * *

I'm interested to know where you think computing is headed, or should head, as we approach the year 2000. Together, we might just be able to spark some exciting product ideas.

David Needle

LETTERS

Editor:

You folks have been a tremendous help to me personally, and through me many, many people. No back issue has or will for years be discarded, as they have real reference value. Your audience is about to grow dramatically thanks to our first hardware grant — what appears to be an annual pipeline! (Knock on wood.)

When we have had to build demand for technology, it is publications like yours that have helped it happen.

Thanks, read you cover to cover....

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LETTERS TO THE EDITOR

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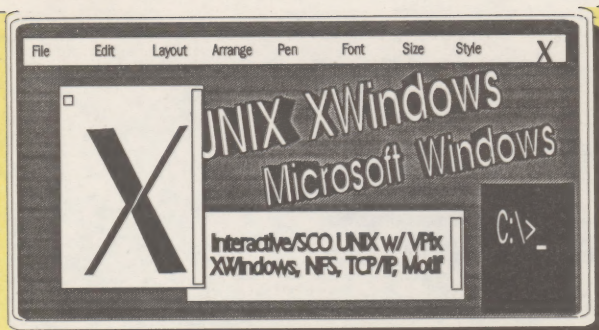
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BOSTON BEAT



By Marguerite Zientara

MacWorld Expo Looks to the Future(s)

The Unknown

Of the three futures in the personal computer industry (Near, Far, and Unknown), it's the Unknown that is the most intriguing. That's when Virtual Reality (VR) will have evolved into whatever it's destined to become. That's when we'll know whether VR is a door to another, richer dimension or just another isolating electronic addiction. (Or both.)

"Reality is an opinion, not a fact," John Perry Barlow, a co-founder of the Electronic Frontier Foundation and "cognitive dissident" based in Pinedale, Wyoming, told MacWorld's Future Technologies Conference. "Anything that reduces personal certainty is good, in my opinion."

Unlike those who view VR as an alienating technology, Barlow thinks it will bring us all together, once the costs of hooking up drop. VR is "the best shot we've got for shared communication over broad distances," feels Barlow, who defines VR as "the total accumulation of networked and communicated information."

On the other hand, as those of you who are "addicted" to your computers already know, VR may prove to be an irresistibly compelling experience (like love or drugs) into which one unwittingly falls, completely self-absorbed. Dr. Timothy Leary, in fact, told the *Wall Street Journal* that Virtual Reality is "like LSD," Barlow reported.

"With this technology, magic happens," said David Smith, founder of Virtus Corp. (Cary, N.C.). "You might find you don't want to communicate with others," he suggested. "You may find the magic a lot more interesting than your friends."

Smith may not be far off, judging from the audience's reaction to his demo of "Virtus WalkThrough," available now on the Mac. WalkThrough allows the user to play with spatial ideas, "fly around" inside 3-D models, and integrate real-time video on the screen. It was compelling from the instant we "flew" inside a "room" that Smith built in seconds as we watched.

The Near Future

Pulling back to the very near future — say, October — *MacWeek* Technical Analyst Raines Cohen shared his inside knowledge that Apple Computer will introduce a line of notebook Macintoshes in October.

Addressing the "Outlook for Portables" session, Cohen revealed that the

machines will be "not unlike the Outbound" (the 6.25-lb. notebook from Outbound Systems, Inc., Boulder, Colo.), which started shipping the week of MacWorld. Apple's line will be based on the 68030 chip and will have a "good" trackball below the keyboard, Cohen said.

Speaking of things "outbound," Cohen remarked that the Atlantis Space Shuttle, then aloft, had a Mac Portable on board. ("Remember, in space 15 pounds doesn't matter!" he quipped). Ex Machina, Inc. (New York, N.Y.) also issued a press release at the show stating that the Shuttle astronauts were wearing the company's WristMacs to manage "critical timing and scheduling information during the mission."

Miniaturization "is the most radical thing happening," noted Tom Rielly, director of marketing for Farallon Computing (Emeryville, Calif.). Attendees agreed with him that what we all want is a combined laptop, cellular phone, pager, and Casio Boss or Wizard all in one tiny unit. (Watch Sony Corp. for miniaturization, he noted.)

The Far Future

In addition, "we need to stop thinking about a computational-centered view of the world," Rielly said. Computer users are not computers, they're communicators, he pointed out. Therefore, integration of the computer and the telephone are essential. "In five years, we'll see ISDN and 64Kbit/sec built-in," Rielly projected.

"You need to be able to communicate with the whole office network by dialing up on the phone," he said, noting that Shiva (Cambridge, Mass.) and Farallon have addressed that need. "The phone/user interface hasn't evolved since the touch-tone," he noted. "Why can't we use the Macintosh interface for dialing, by pointing to a picture of the person we want to call?"

As Steve Hix, from InFocus Systems, Inc. (Tualatin, Ore.) put it, "Portables haven't approached the simplicity needed for the average user. They must be as easy to use as a telephone. The market has supplied 10 percent of the portable market's needs; the other 90 percent aren't at this show."

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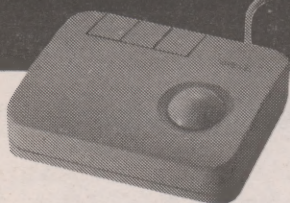
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FROM PAGE 8

Fellowship to be awarded for the 1992-93 academic year to a graduate student whose dissertation will address some aspect of the history of computers and information processing.

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The stipend will be \$10,000 plus up to \$2,000 for tuition, fees, travel to the Babbage Institute and relevant archives, and other approved research expenses. The deadline for applications is January 15, 1992.

For complete information on applying, contact the Charles Babbage Institute, University of Minnesota, 103 Walter Library, 117 Pleasant Street S.E., Minneapolis, MN 55455. Telephone 612/624-5050.

Boston Computer Society "Women's Interests" SIG

"Personally, I feel that when women go to the BCS (Boston Computer Society) IBM Subgroup meetings, they're not getting the same benefits as the men are," observes Lucy Rakov, who, in response, has taken it upon herself to organize a women-oriented BCS SIG (Special Interest Group).

The lack of benefits to women range from "the informal networking, which seems to be very male-directed, to the hierarchical structure of the group," Rakov feels. The IBM PC Subgroup's newly appointed board of directors, she

pointed out, has no women on it, even though the group itself has more than 17,000 members. (The BCS' main board does have women members.)

Revved up in April, the Women's Interests SIG had its first real meeting in June, and will hold the second one on Monday, September 23 at 6:30 p.m., at the IBM Offices, Suite 230, 188 Needham Street, Newton, Mass. The stated topic: "Women Entrepreneurs Talk Business."

Rakov, who has more than 20 years experience in the computer industry and who did pioneering work in early real-time programming systems, now runs her own information management consulting company. "I felt it was time to start something like this," she says, "with a very key reason being the need for women to be able to network effectively."

Some of the issues expected to be addressed by the new SIG are job-sharing and working part-time, interacting more effectively in a male environment, and finding (or becoming) a female mentor.

Does one have to be technical to join the new SIG? "At the first meeting, we had a whole range of people," Rakov says, "and I would really like to see the non-technical women appear. For example, someone who's dealing with word processing on a daily basis and is made to feel uncomfortable when she asks questions."

If you'd like more information on the BCS Women's Interests SIG, call Lucy Rakov at 617/969-4556.

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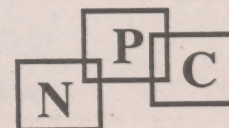
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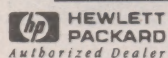
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There are many software training options available in the world — computer-based, video-based and audio-based instruction, for example (see cover story). But there's probably nothing quite as helpful and reassuring as having someone standing next to you, ready and able to tell you what to do next, or to instantly help you out of a jam.

If, after considering the alternative ways to learn about using software, you decide that hands-on personal training is for you, here is some information about your choices in the Boston area.

The table accompanying this article (see page 12) lists 17 companies that devote at least 75 percent of their time to hands-on computer software training. Most of those listed offer training exclusively, but some also do software development and/or consulting.

The information in the chart is based on recent telephone interviews with the top management (or top district management) of the companies included. The list is not meant to be comprehensive, but does represent some national players, numerous large local companies, some smaller local companies, as well as a one-person operation (MicroSolve).

In each of those categories, there ex-

Local Trainers At Your Service

By Marguerite Zientara

ist other companies not mentioned here. You can find out about them in newspaper ads, in the Yellow Pages under "Computers—Training," through user groups, and in Boston *Computer Currents'* Calendar section at the back of this magazine, where some of their courses are listed.

Other Local Alternatives

Besides training companies, many computer dealers and VARs (value-added resellers) offer training programs, focusing on the products they sell. Application Systems Group (Stoneham, Mass.), for example, has two classrooms and offers an extensive Novell education program, as well

as Platinum, Solomon and Great Plains courses. ASG's telephone number is 617/279-2790.

Vitronix, the Westboro, Mass.-based distributor, has a division that offers training to end users (and to dealers) in NetWare, Unix and Oracle. Call the Vitronix Education Center at 508/366-1144.

Two examples of companies whose business is about 50 percent software development and consulting are Computers Without Fear (Waltham, Mass.), which teaches DOS software to corporations, and The Support Group (Newton, Mass.), which offers strictly Macintosh training. There are numerous others.

The many colleges in the Boston area

are also a rich source of computer education. Their sources for trainers vary, but if you happened to sign up for computer training at Boston University's Metropolitan College, for example, you would be taught by someone from the largest computer training firm in the area, Professional Development Group (see table on page 12).

For low-cost training, community colleges and the Boston and Cambridge Centers for Adult Education offer good, reasonably-priced education. Bootstrap Associates (see table) designed the entire computer curriculum at the Cambridge Center for Adult Education. The Boston Computer Society (BCS), too, holds many classes every month in the \$25-\$50 range (call 617/252-0600).

The BCS also sponsors the Summer Computer Institute, which this year tackled such topics as "Business Solutions" and "Desktop Publishing" in intensive, week-long, hands-on workshops. The courses, held at Lasell Junior College (Newton, Mass.) every summer, cost \$550 each in 1991.

In a Class By Himself

In a singular category is Russ Walter, the Somerville-based author of *The Secret Guide To Computers*, soon to appear in its 15th Edition. Walter expects to teach his popular 20-hour, two-day "Blitz" course (price, \$55) this October, somewhere in Boston.

SEE PAGE 13

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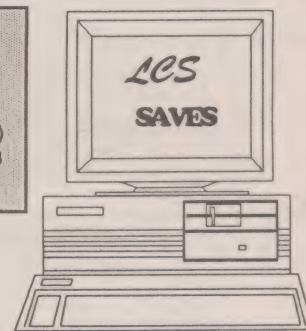
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American Computer Institute of Training 508/474-0358	Boca Raton, Fla. (Andover)	1988	DOS	All. Plus integrat- ed software & Project Mgt.	1, Andover	2	15	2	5-10	*	N.A.
Bootstrap Associates † 617/965-8773	Newton	1983	DOS, Mac	All but networks	1	On-site only	8-12	1	8-10	Straight corporate rate: \$750/day **	N.A.
Boston Center for Computer Applications 617/247-0538	Boston	1982	DOS, Mac	All	1	3	10	5	0	\$200, discounts available	\$195 half-day, \$375 full-day
Boston Computer Lab, Inc. 617/345-0870	Boston	1985	DOS, some Mac	All but networks	1	2	12	5	0	\$195/day, \$375/2 days	*
CompuSkills, Inc. 603/622-3024	Bedford, N.H.	1991	DOS	All but networks	1	3	6	4	0	\$100-\$150, depending on level	N.A.
Computer Train 617/876-4066	Cambridge	1983	DOS, Mac	All	2, Cambridge, Boston	2	10	1	17	Reg., \$225. Fall Special, \$149	\$100/hour
Computer Tutor Corp. 617/964-5858	Newton Lower Falls	1981	DOS, Mac	All	2, Newton, Boston	5	10	5	6	\$195, discounts available	\$350 half-day, \$600 full-day
Educational Training Institute 617/231-5944	Saugus	1986	DOS, Mac	All	3, Boston, Burlington, Danvers	3	10	2	7-10	\$195	\$50/hour
Executive PC Education Centers 617/426-7240	Boston	1983	DOS, Mac	All	3, Boston, Burlington, Marlboro	6	10	15	0	\$180/day, \$350/2 days	\$90/hour
ExecuTrain 508/879-3076	Atlanta (Framingham)	1983	DOS	All	2, Boston, Framingham	4	10	5	0	\$200 average	\$400 half-day
MicroSolve 617/354-2365	Cambridge	1984	DOS	All but networks	1	1	6	1	0	\$225 base price	\$75/hour
PC Concepts 617/890-0009	Philadelphia (Boston)	1984	DOS, Mac	All	3, Boston, Waltham, Nashua, N.H.	6	12	6	0	\$225, discounts available	\$50-\$75/hr., depending on level
PRA Computer Training Centers 508/481-1800	Marlboro	1983	DOS, Mac	All	2, Marlboro, Andover	5	8-10	7	15- 20	\$80/day for 2 half- days	Approx. \$85/hour. (4-hour min.)
Professional Development Group, Inc. 508/872-1499	Framingham	1981	DOS, Mac	All	6†	14	10	19	5	\$190	\$35/hour base price
SIS, Inc. 617/290-0750	Harvard	1985	Mac	All	2, Harvard, Everett	2	6-8	4	0	\$300	\$80/hour
Softeach 617/244-0037	Newton	1984	DOS, Mac	All. Plus accounting	1	On-site only	12	1	12	*	\$85/hour, 3 hours/\$240
USA Computer Training Centers 617/273-1211	Burlington	1987	DOS, Mac	All. Plus integrated software	2, Boston, Burlington	5	8	4	3	\$225, discounts available	\$79/hour, discounts available

*Call for quote. **Price for class as a group. †Trains the public through Cambridge Center for Adult Education. ‡Boston, Framingham, Woburn, Braintree, Providence, Hartford

FROM PAGE 11

With a dynamic teaching style that encourages class participation and "emotional involvement," he says, Walter focuses not so much on how-to keystrokes as on revealing the pros and cons of various software packages that he compares side-by-side. "I help people figure out which software they really want, to best meet their needs," Walter says.

Walter also offers the most extensive telephone support in the world. Call him at home anytime 24 hours a day (really) and he'll give you free advice and information. You can call him even if you don't take his course. His number is 617/666-2666.

What Training Firms Have in Common

There are a few things on which everyone interviewed for this article agreed. The training offered is hands-on, and all 17 offer on-site corporate training. Those that hold public classes all have a 1:1 student to computer ratio, and they will help the prospective student determine which course he or she should take, through telephone interviews and sending out course outlines.

All the companies surveyed offer take-home materials to students, although there is great diversity in what a student actually gets. Many offer manuals and data disks that replicate class exercises. Some write their own manuals, others use books published

by independent publishers. Still others use a combination of self-published workbooks and commercial publications.

Computer Train publishes its own software training books, which it gives to students and sells to other training companies. Professional Development Group also publishes its own books and issues them to students, although it does not sell them on the outside.

With so many different philosophies regarding take-home materials, prospective students may want to ascertain exactly what they'll be carrying away from a course.

Where They Diverge

Every company included here offers telephone support after you've taken a class, but the degree of support varies widely. Educational Training Institute, for example, offers one month of telephone support, and SIS, Inc. gives support for 60 to 90 days.

Several firms limit questions to "topics covered in the course taken, at the level of the course taken." That means that if you took a beginner class in something and called with a question that's covered in the intermediate class, the trainer would recommend that you come back for further training, instead of answering your question.

Executive PC Education Centers, ExecuTrain and CompuSkills all offer "unlimited" telephone support, but CompuSkills takes the cake by invit-

ing back for free one-to-one training anyone who failed to "get" the lessons taught. "We bend over backwards to help people," says Alice Clough who, although her company is only seven months old, has been training for eight years.

Another area where companies differ is the question of a guarantee. Some companies proudly advertise a "money-back guarantee" (Boston Computer Lab, Computer Train, Educational Training Institute, ExecuTrain, Professional Development Group, and SIS).

Others say the question has never come up, but if it did, they would give someone's money back. A couple of firms hedged on the question but re-

ally didn't seem open to the idea of refunds. Potential students should ask about this aspect of a company, if it's a concern.

Letting students re-take a class if they "had a bad day" during the course or just didn't get it is another area where some companies are emphatically liberal.

Educational Training Institute, Executive PC Education Centers, ExecuTrain, Professional Development Group, and USA Computer Training Centers do invite students to come back repeatedly. As Jerry Crowley, USA Computer Training president, puts it, "People in the job market use us to keep their software skills fresh."

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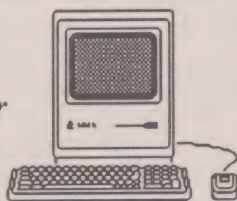
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NEWS & INDUSTRY BOSTON COMPUTER NEWS

By Marguerite Zientara

Power Up Software Corp. Acquires FormWorx Corp.

Power Up Software Corp. (San Mateo, Calif.) has announced the acquisition of Waltham, Mass.-based FormWorx Corp., a developer and marketer of PC-based forms software. Specific terms of the acquisition were not disclosed, except that it was a cash purchase of assets.

"The FormWorx line fits well with Express Publisher, our DOS-based desktop publishing product, and our Macintosh product, Fast Forms," said Edward Lauing, Power Up president and CEO. As for FormWorx, it gets "some marketing muscle" for its product line out of the deal, a FormWorx spokeswoman said.

S. Ming Lee, president of FormWorx, will now be Director of the FormWorx Group, overseeing all Waltham operations. His partner and FormWorx co-founder, Vivek Basrur, will be Director of Product Development for forms products.

FormWorx' product development, support and marketing continue in Waltham, while sales and operations will be conducted from Power Up's headquarters in San Mateo. There are no plans to relocate any of FormWorx' 20 employees, although their roles "are still under discussion," Power Up said.

FormWorx is at 1601 Trapelo Road, Waltham, MA 02154. Telephone 617/890-4499.

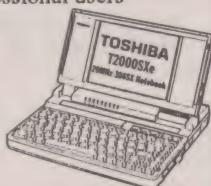
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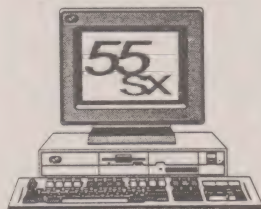
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Computer-Based Communications Expands Offerings

Computer-Based Communications' (Lexington, Mass.) online service for PC and modem enthusiasts — known as Argus Computerized Exchange — has increased to 57 dial-up phone lines. In addition, Argus is now accessible via PC Pursuit, the low-cost national packet switching network. Information on joining PC Pursuit can be found online or by dialing (voice) 800/736-1130.

Argus is free to the user and offers many online activities, including a tele-

conference center and a first-of-its-kind Boston Area Restaurant Database. Also available are e-mail, shareware, several message forums and other databases, including the Boston Computer Exchange.

Future plans include online daily news, additional message forums and more databases. For more information on Argus, contact Computer-Based Communications, 430 Bedford Street, Suite 175, Lexington, MA 02173. Telephone 617/674-2354.

Snap Software, Inc. Appoints Paul Rayment President



Snap President Paul J. Rayment

Snap Software, Inc. (Manchester, N.H.) has announced the appointment of Paul J. Rayment as president of the company. Rayment was founder and president of Sales Solutions, Inc., which has been acquired by Snap.

Snap Software provides sales con-

sulting services and a set of fully integrated sales and marketing software applications said to enable sales managers and professionals to gather, maintain, analyze, and share marketing information throughout a corporation. The software runs on IBM PS/2 and compatible PCs and laptops, and on industry-standard networks.

Before founding Sales Solutions in 1986, Rayment had more than 23 years of award-winning sales experience with IBM Corp. While at IBM, Rayment was recognized as the number-one sales representative, and his sales force was nationally recognized as the number-one performing marketing group in the general systems division. Rayment's company, Sales Solutions, was a sales and management training and consulting company.

Snap Software is located at 175 Canal Street, Manchester, NH 03101. Telephone 603/623-5877.

Spinnaker Announces End-User Graphical Database Access Tool

Spinnaker Software Corp. (Cambridge, Mass.) has introduced a database access and application development tool said to provide users with point-and-click access to corporate data across multiple databases and servers without programming.

Personal Access, incorporating Spinnaker PLUS applications development technology, reportedly provides graphical access and cross-database manipulation of major databases, initially supporting dBase (Ashton-Tate), Paradox (Borland), Btrieve (Novell),

Oracle, SQL Server (Microsoft), OS/2 EE Database Manager (IBM), and DB2 (IBM) through a gateway.

Personal Access is said to allow any end user, even those without knowledge of databases and programming, to create an SQL or other database query in less than five minutes without touching the keyboard.

Personal Access is scheduled to ship in October; pricing has yet to be established. Spinnaker is at 201 Broadway, Cambridge, MA 02139. Telephone 617/494-1200.

Anti-Static Disk Carrier Available



If you regularly tote a lot of disks around, Amherst International Corp. (Manchester, N.H.) offers a portfolio-style holder that can accommodate up to 48 disks of either 3 1/2- or 5 1/4-inch size, or both sizes.

The Disk Manager features anti-static loose-leaf pages, each of which holds four disks. Pockets inside can hold business cards, pens, pencils, and writing pads. The three-ring binder features heavy duty commercial construction with locking rings for added safety.

The exterior is moisture-resistant nylon, covering a shielding layer and hard-board reinforcing. A zippered closure keeps disks securely enclosed. The holder has an outside carrying handle and index card pocket.

The Disk Manager costs \$59.95 with six pages. Additional pages cost \$8.95 for six. Amherst International is at 540 N. Commercial Street, Manchester, NH 03101. Telephone 603/644-3555 or 800/547-5600.

PC Helpdesk Service Established for Corporations

Call Dr. Byte! (Swampscott, Mass.) announces a national telephone help service offering software and hardware support and technical information and advice for PC users.

Helpdesk services are available on an annual contract basis, with the average cost per solution being \$20. Communications options include 800 numbers, leased lines, Fax and remote control mirror-monitoring. If a question cannot be answered, the customer is not billed for that time. Customers receive reports on call activity.

Dr. Byte provides general support for such leading software packages as Lotus 1-2-3, WordPerfect and Windows 3.0. Dr. Byte will help customers select software, install it properly and then develop job-related applications.

Call Dr. Byte! is an independent company and not associated with any software or hardware vendors. The goal of the company is to be an economical alternative to an in-house PC support group. Call Dr. Byte! is located at 44 Winshaw Road, Swampscott, MA 01907. Telephone 617/595-8000.

SEE NEXT PAGE

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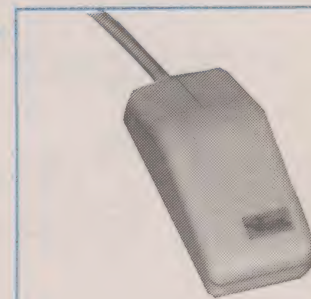
PageBrush/Color for the Macintosh
PageBrush/Color for the PC



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The Little Mouse/ADB for Macintosh
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The White Mouse

The White Mouse is the three-button mouse for your PC. It features a smooth, opto-mechanical mechanism and an ergonomic design. As with all of Mouse Systems PC mice, the White Mouse is 100% Microsoft compatible, 100% Windows compatible and is available in bus or serial versions.

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FROM PREVIOUSPAGE

New Edition of Directory Now Available

Coordinated Service, Inc. (Littleton, Mass.), a consulting firm for the service industry, has updated its *Directory of Repair Depots*, which was first published in 1986.

This edition contains more than 300 listings of companies providing depot repair on computers, peripherals and other high-tech equipment — an increase of 20 percent over last year. The list is assimilated from the 3,000 companies currently listed on Coordinated

Service's database of independent service companies, called *Service Sourcery, Too*.

Listings include company name, address, contact, equipment services, pricing, turnaround time and other services offered, as well as an index by location.

The new edition costs \$69.95 from Coordinated Service, 531 King Street, P.O. Box 1260, Littleton, MA 01460. Telephone 508/486-0388.

Watch Hill Debuts Data Compressors for High-Speed Communications Lines

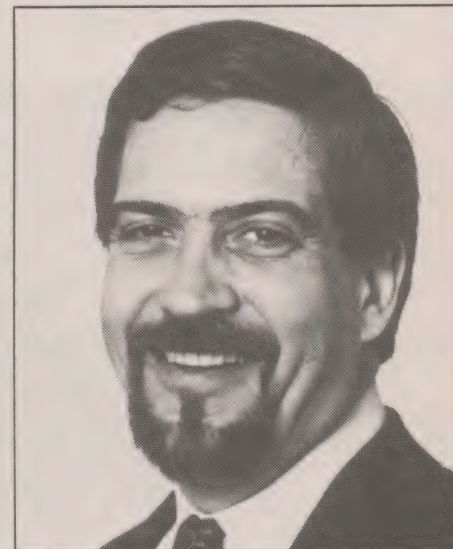
Watch Hill Research, Inc. (East Greenwich, R.I.) has announced what it calls "the world's first" data compressors designed expressly for high-speed T-1 communications lines.

The Time Machine T-1/E-1 (for T-1 lines) and the CFT-1 (for fractional T-1 circuits) reportedly maintain data integrity while more than doubling existing leased-line capacity. They operate at compression ratios from 2:1 to 6:1.

The T-1 and fractional T-1 data com-

pressors are said to let large companies transmit data between LANs in different offices at higher speeds, or just buy a portion (fractional) of the T-1 line and halve the company's telecommunications costs.

According to Watch Hill President and CEO Matt Lukens, Jr., "The 21st century really slams into the early 20th century when LANs become 'bottlenecked' at a telephone system not able to handle more than 1.54 megabits at best." With the addition of a T-1 Time Machine, a single T-1 line can accommodate two LANs with a maximum speed of 2 megabits-per-second



Watch Hill Research President & CEO
Matt Lukens, Jr.

At Last. New England Business and Computer Professionals Have Their Own Conference and Exposition.

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You'll learn about new methods, solutions and technologies designed to make your business run more efficiently. You'll discover the differences between similar technologies, system platforms and applications. And you'll hear industry leaders speak on what they know best...and what you need to know most.

On the floor, you'll see products and services that display the means to make you more competitive and improve your performance. And you'll be able to acquire hard-to-get information in one-on-one sessions with experts, as well as network with peers and discuss common issues.

This is one show you won't want to miss. So make plans to attend now. And get ready to get down to business at the NORTHEAST COMPUTER SHOW, November 13-15, 1991, at the World Trade Center, Boston, MA. **Call 617-449-6600, ext. 6520. For exhibit space information ask for ext. 4084. Or mail the coupon below.**

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Display Tablet Available for Desktop Pen Computing

SuperScript, Inc. (Cambridge, Mass.) has introduced the SuperScript II, its newest integrated display tablet peripheral for desktop pen computing. SuperScript II features page white backlit LCD display, 16 levels of gray scale, 640 x 480 pixels, VGA-compatible ISA bus interface card for display output and standard serial interface for digitizer.

SuperScript II comes bundled with PenSieve, SuperScript's software interface between handprinting recognition and query-driven applications.

SuperScript II costs \$1,595 from SuperScript, Inc., 36 Bay State Road, Cambridge, MA 02138. Telephone 617/876-0787.



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DEALER SPOTLIGHT

Interviewed by Marguerite Zientara

"We know where to get all the name-brand parts at the lowest prices."

Company Name:	Logic Computer Solutions, Inc. (LCS).
Locations:	135 Elm Street, Braintree, Mass. 617/380-3524. 155 Jefferson Blvd., Warwick, R.I. 401/732-2420.
Type of Sales:	Storefront and direct corporate sales.
Hours:	Mon-Fri, 10-6; Saturday 10-4. Warwick store closed Saturdays.
Date Started:	October 1990.
Salespeople:	Braintree has 3 salespeople; Warwick has 2.
Hardware:	LCS store brand PC made from IBM-compatible parts. Includes 286, 386 and 486 systems. Notebooks on special request.
Software:	On request.
Consulting:	Yes. Needs analysis and networking configurations.
Warranty:	Seven-day money-back guarantee. One-year parts and labor warranty.
Service Policy:	Free unlimited telephone technical support.



LCS Partners Hung Vo (left) and Ha Pham.

Logic Computer Solutions (LCS) opened its doors just under a year ago, offering the LCS store brand at low prices and with high-grade service. Although LCS does not offer on-site service contracts, it does do fast-turnaround carry-in repairs, and offers unlimited telephone support. "Why do mail-order when you can get a Low Cost System ('LCS') for less!!!" its advertisement asks. Judge for yourself, from these recently advertised system prices: 286-12MHz VGA system, 1MBRAM, two floppy drives (5 1/4-inch & 3 1/2-inch), 42MB hard drive, 2 serial/parallel/game ports, 16-bit VGA graphics card, VGA color monitor, 101-key enhanced keyboard, \$799.

386-33, 64K cache SVGA system, 100MB hard drive, \$1,629.

486-25, 128K cache, 4MBRAM, 210MB hard drive, 1MB SVGA system, super tower case or AT case, \$2,999.

Our interview was with LCS co-owner Ha Pham.

Your advertisements say "Best service." What do you mean by that?

Any time within a year of buying a system, if a customer has any problem, they can bring the computer in and we'll get it fixed for them right away. If they want to wait while we do the work, we can often fix it in less than half an hour. If they ship the computer to us, we'll turn it around in 24 hours usually. We also have two service locations, in New Jersey and Virginia.

How many people do you have in your service department [in Braintree]?

Right now we have one engineer and one technician, and the rest of us help out too if necessary. Most of us here are engineers.

What would you say differentiates your store from the competition?

The main thing is the pricing. We offer prices that are frequently below mail order, and we're here, we're local. I keep checking the mail-order advertisements in computer magazines, and we're a lot lower. We know where to get all the name-brand parts at the lowest prices. Then there's the service that we offer. A lot of our customers are repeat customers.

What's selling the best for you?

Right now it's the 386-25 and 386-33.

Do you put together any laptops or notebook computers?

Yes we do, on special order only, because the prices are still very high.

Are there any particular technological areas that people are asking about right now, like multimedia, for example?

People aren't asking too much about multimedia at all. But people are asking about networking. Most of the customers we have are end users, so a lot of them are really asking what networking systems they should buy.

What is your biggest challenge as a computer store owner?

Trying to keep the service the best for our customers. Trying to keep all of them happy.

Do you have any plans for future expansion?

We have our hands full right now, but we'd like to open a couple more stores out of state within the next couple of years. They'd be in New England. We'd like to be in every New England state.

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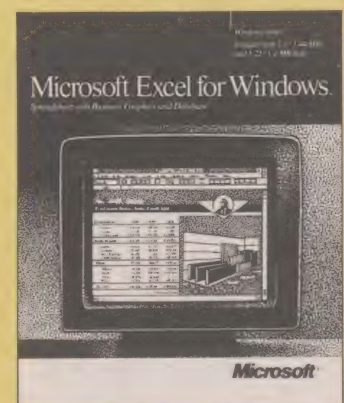
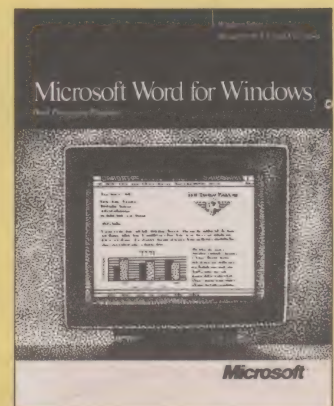
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INDUSTRY INSIGHT



By Tim Bajarín

Apple Execs Speak Out on IBM Deal

I sat down in late July with John Sculley, Apple's CEO, and Joe Graziano, Apple's chief financial officer, to get their view of the IBM/Apple deal and become better informed about their five-year plan. The groundwork for our discussion was the fact that they could not talk directly about the IBM/Apple deal since no contracts had yet been signed, but they would answer questions about Apple's direction and their view of the deal. Sculley said he has been put off by the reports that this IBM deal and the new direction of the company was not planned out, but was just a knee-jerk reaction to the ACE consortium.

On the contrary, Sculley claims that the move toward a relationship with IBM came after long discussions with many of the other key industry players. He maintains that he had outlined his views on technological partnerships in his book, *Odyssey*, and had reiterated this view in a speech to the Software Publishers Association last fall.

According to Sculley, the technology of the 1980s is not powerful enough to meet the computing demands of the 1990s. It will take technologically-driven partnerships to provide the right mix of technology to succeed in the 1990s. He also pointed out that the 1990s will be solution-driven via PC-based networks, and that these networks will be multi-vendor systems.

It is his contention that the most important ingredient for the 1990s is object-based operating systems that are written on a rich multiuser OS (operating system) kernel. That is followed by innovative hardware, using RISC-based chips. He believes that the only successful hardware makers in the 1990s will be companies that control the hardware and software operating systems they provide. This includes being able to provide customizable solutions as a part of the operating system program.

Sculley expects the demand for shrink-wrapped applications to go down by the mid-1990s, while customized, object-based user-programmable solutions will be at the heart of a company's software solution.

With this direction in mind, Sculley, Graziano and Apple President Mike Spindler have spent the last 18 months working on restructuring Apple so that

it can be a major player in the 1990s. This, according to both Sculley and Graziano, is what drove them to begin discussions with IBM.

Sculley says that IBM was considered the right partner because of their technological prowess, and because they represented the proper expression of the solutions-based company Apple needed to align themselves with for greater corporate acceptance. To Sculley, an IBM/Apple alliance represented the ability to provide innovative products together for the 1990s.

It is also his view that an IBM/Apple alliance will shift the direction of the industry and help the industry make the transition from the CISC-based chips of the 80s that most PCs are based upon to the faster RISC-based chips that will dominate the computer market in the 90s. Sculley, Spindler and Graziano were very aware that all IBM partnerships and alliances to date have not been successful. Sculley said they studied that issue very carefully and concluded that all of the joint relationships had one important flaw in them: IBM didn't really need the relationship or company for their success. He cited ROLM as a prime example. IBM did not need ROLM to be successful. ROLM only extended IBM's reach.

He said that with that understanding, Apple decided to open its labs to IBM so that IBM could see what they were up to. Apple was convinced that their object-based OS would be something IBM really would want, and need, in order to take their PC platform into the 1990s. In return, IBM would open doors to Apple in the corporate market, and allow them to have an extend-

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able architecture that connected to the IBM mainframes and minicomputers already on the market. More importantly, together they could speed up the development of an object-based OS, specifically written for RISC, yet have backward compatibility with Intel- and Motorola-based chips already on the market.

Breaking Operating System Complexity

Key to this joint software development program was the goal of breaking the operating system complexity via OOPS (object-oriented programming software), and using the OS to create the basis of solutions for PC networks with the customizable features of an object-based system.

When Apple finally did show IBM what they were doing, IBM officials realized that Apple had a major edge on both the understanding and the development of an object-based OS. They decided quickly to begin the process of structuring this alliance, with Sculley of Apple and Cannavino of IBM working full time on the project.

The framework of the joint relationship is actually very straightforward. IBM provides the RISC chips and the underlying Unix code (via IBM's version of Unix, called AIX). Apple provides their object-based OS, code-named PINK. Motorola, along with IBM, designs a one-chip version of

IBM's powerful RS/6000 RISC microprocessor. Motorola also gets the privilege of selling the RS/6000 to other hardware vendors.

Key to the deal is the new software company being planned. IBM and Apple will reportedly each own equal interest in the new company. Its charter is to provide an object-based operating system that will run on the

grams, Sculley expects many other vendors to also use this new object-based OS in their own hardware programs. IBM and Apple plan to distinguish themselves via the innovative hardware they can each provide that works within the structure of this new OS. Since it will take Apple and IBM's joint software development company about 2 1/2 years to bring out this new ob-

will also be a native port of the original Mac OS for use on an RS/6000-based Mac. This could come as early as the end of 1992. He expects to also have an RS/6000-based Mac that uses IBM's AIX in late 1992.

In my talks with both Sculley and Graziano, they went to great lengths to assure me that the new jointly developed OS will also have backward compatibility with existing Mac software. They clearly went into this deal making sure that bridges, or native mode extensions, would be built into the new OS, to protect the software investments of their existing customers.

But Sculley pointed out that these bridges would not allow for full optimization of this new OS. It is his view that we will go through a few years of transition using these bridges, but eventually, the industry will make a complete move to using object-based operating systems and applications strictly written for RISC platforms. While RISC will be at the workstation and server level initially, Sculley expects it to be the main CPU at the desktop by the mid-1990s.

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Tim Bajarin is Executive Vice President of Creative Strategies Research International, a market research and consulting firm. Correspondence may be sent to him at CSRI, 4655 Old Ironsides Drive Suite 490, Santa Clara, CA, 95054.

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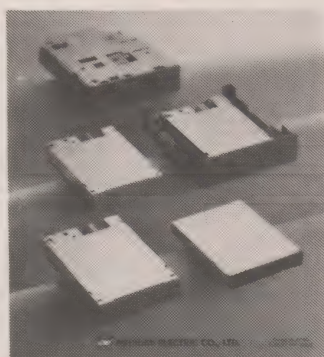
Motorola 68000, Intel X86 and IBM's RS/6000 platforms. This company is set up like a company-backed start-up or spin-off. Employees will get stock and options, with many incentives to bring code in on time.

Like other operating system companies already on the market, this new company will be able to sell this new OS to anyone who wants it. While IBM and Apple will develop personalized versions of the OS for their own pro-

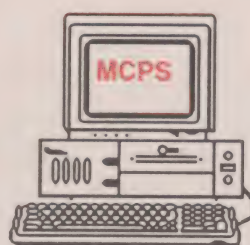
ject-based OS, what does Apple do in the meantime?

According to Sculley, Apple continues to develop a well-rounded program around the Motorola 68000 chips they already use. New systems using the 68040 will be out later this year, with new portables using various Motorola chips coming this year as well. But he feels they need to offer an RS/6000-based Mac sometime in the near future, so according to Sculley, there

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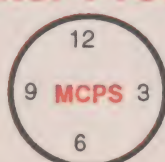
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Art for Computing's Sake

By Rick Altman



First Place
Horseman
Steve Lyons, U.S.A.



Rest
Luis Javier Orozco, Mexico

While I was in continual awe over the conceptual and drawing skills represented by the over 900 entries, my impressions ran deeper than that. I was both encouraged and discouraged by what I witnessed that evening.

First off, it was nice to see so much talent being channeled through PCs and PC software. The PC has long been the little brother of the Macintosh when it comes to "real" art, but programs like CorelDRAW are responsible for what might be the PC's first legitimate awakening in the field of electronic art. Corel's annual design contest showcases not only the success of its product, but also the skills of those who have chosen to use it. It's nice to know that we can produce more than just business documents on our PCs, and I certainly hope that the other players in the field — Adobe, Micrografx, Computer Support Corp. — provide similar opportunities to showcase their users' efforts. I promise that I'll give equal time to the others, as little would please me more than to be able to demonstrate to you that PCs can produce professional art.

Now let's talk about that word *art*. I don't know what I expected when I first saw the entries, but I'll tell you what I didn't expect: I didn't expect to see a predominance of 21st-century, super-slick designs. Looking back, I was naive. As the computer is a phenomenon of the present and future, so are its users, and that goes for its artists



Rick Altman's Choice
The Piano,
Re Giovanni, Italy

as well. That's only logical, but still I was disappointed. I was hoping to see more sketches, more mood, more use of soft color. Instead, as the winning entry, "Horse Man," illustrates, the genre of electronic art is just as much electronic as it is art. And indeed, most of the adjectives used by the judges as they perused the entries were along the lines of "exciting," "flashy," "vibrant," and "sensational."

As brilliant and creative as the entries and their authors were, as a lot they tried too hard. This is really the old rap on desktop publishing — that because the tools are available, there is an irresistible urge to use them all. Many, if not most, of the entries had one too many elements, one too many



Castle
Ceri Lines, Taiwan

Thoughts on Corel's Annual Design Contest

colors, one too many overlapping images — one too many shining examples of the technology instead of the art.

My first place vote for "The Piano" was cast not only because I liked it, but because among the three dozen finalists, it was the one that looked the least computerish. From an art for art's sake perspective, my bias is nothing to be proud of. Why should I favor traditional art over electronic art? Why do people root for the underdog? I just really wanted to see more pieces that didn't necessarily come from the computer. Not because that would mean they were better, or more artistic. Just different — not so loud and bold, not so monotonous in their use of flash, verve, and endless impressive effects.

Maybe history will show this to be a phase, like all others in the arts. Nonetheless, I can't help but think that today's designs are more a product of the computer than of the natural evolution of man as artist.

SEE PAGE 24

In a momentary lapse of its usual good judgment, Corel Systems invited me to be a judge for its annual design contest. The contest rules were simple: all entries were to have been produced primarily with CorelDRAW, and the judges were to choose the ones they liked best. In its customary fashion, Corel lavishly treated all who participated to a huge banquet dinner, a mega-party, and major prizes for the winners.

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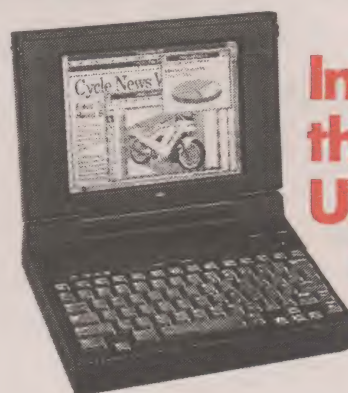
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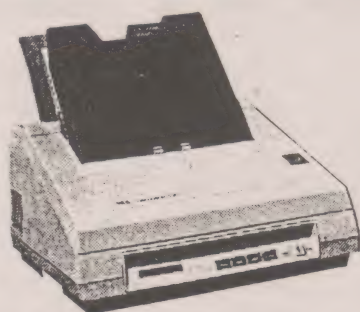
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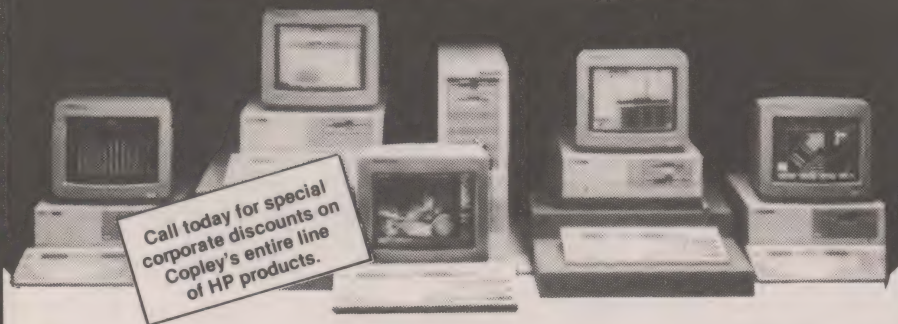
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FEATURE

FROM PAGE 22 A Paucity of Women

And that leads me to my second disappointment: man, not woman. An overwhelming majority of entrants were men, from all over the world. Yes, the international mix of designers was quite exciting, but the gender mix was nonexistent. For that matter, most of the judges were male also, and I don't know who to blame for this. As one Corel representative remarked, "We certainly didn't do this intentionally — we invited all to participate, and that's just the way it turned out."

I know they're out there. At the annual Ventura Publisher Conference, women comprised over 60 percent of our registration of between 500 and 800, and over half of them came from graphic arts backgrounds and used PC drawing software to produce their renderings. It would be nice for that percentage to make its way into Corel's annual contest.

Ultimately, Corel Systems' annual design contest is a wonderful statement — a literal celebration of the evo-

lution of the PC as a tool for artists. Whatever philosophical objections I might have concerning the art itself, the plain fact is that today's software has taken us to a new place. I can't wait to see where we go next.

CorelDRAW World Design Contest

The 1992 \$1,000,000 CorelDRAW World Design Contest is open to all registered CorelDRAW users. Monthly contests begin September 1 and culminate in the 3rd Annual CorelDRAW World Design Contest in May 1992, held in Ottawa, Ontario. For contest rules and entry forms, call 613/728-8200 ext. 1609 or fax 613/728-2891.

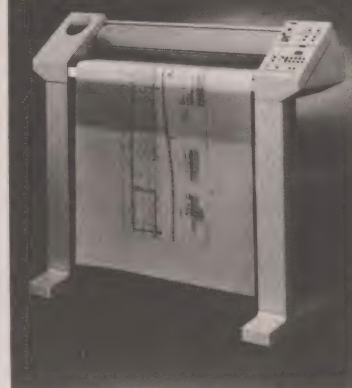
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Rick Altman, author of five books on desktop publishing, consults and lectures on corporate publishing throughout Northern California. He hosts the annual Ventura Publisher Conference in San Jose, CA each fall. You can write to him on CompuServe (72341,1714) or at 20204 Merritt Drive, Cupertino, CA 95014. □

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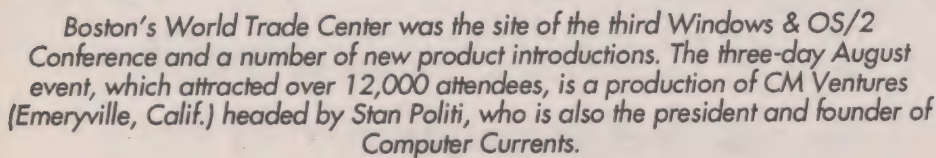
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Macromind has finally brought its considerable Macintosh expertise to Windows with the introduction of Action!, a program described by company president Bruce Cummings as "Instant multimedia for people who don't make a living making presentations." Action! is designed to let users easily create presentations incorporating sound, motion, and animation with text and graphics. It includes dozens of ready-to-use templates which users can customize by adding their own text, sound or graphics. Also included is a Clip Media Library of special sounds, as well as still and animated graphics. Cummings said he has been talking to some notebook PC manufacturers about incorporating sound capability that products such as Action! would be able to exploit. The \$495 Action! package is compatible with SoundBlaster, a popular PC add-in card. Action! is scheduled to ship late September and is available from Macromind, 410 Townsend Suite 408, S.F., CA 94107. 415/442-0200.

tracking system. The product is a relational database developed in SuperBase and is designed to keep track of clients, calls, schedules, priorities, and expenses. A notes field can be of unlimited size (depending on memory) and are keyword searchable. Other features include auto-dialing, mail merge to AmiPro and Microsoft Word for Windows word processors, and a mailing label generator that includes eight different Avery label formats. PowerLeads!, slated for release in October, is the first module in PowerOffice!, a family of groupware and organizational productivity tools the company is developing. Contact Pyramid Data at 1000 E. William Street Suite 100, Carson City, NV 89701 or call toll-free 800/972-7972.

Bloc Publishing showed off its WindEase (\$59) Windows tutorial package. After Windows is installed, WindEase is designed to give the user hands-on or interactive instruction in all the major aspects of how to use Windows including the File Manager, DOS Executive, etc. WindEase is "unspectacular, but straightforward and essential for anyone wanting to learn Windows," said Tim McGuinness

Pyramid Data, Inc. showed off its \$295 PowerLeads! package, a Windows contact management and sales lead

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FROM PAGE 25
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— David Needle

SPI Unveils WindowBase

Software Products International (San Diego, Calif.) has introduced WindowBase, a stand-alone relational database management system for Microsoft Windows that supports structured query language (SQL).

The company claims that a novice with little or no knowledge of SQL can execute simple or complex queries to get the information he wants from the database via button selections, edit controls, scroll bars and check boxes and then perform operations on the results.

The company claims WindowBase has an easy-to-use graphical user interface with customizable menus, uses Windows Dynamic Data Exchange (DDE), has full support of SQL, and has a C Developers Kit.

The DDE is pointed out by SPI as being one of the most important features of the WindowBase product be-

Photo by Steve Lipsky



Serge Timacheff (left) of Logitech demos the new FotoMan.

cause it allows users such data management tools as Windows spreadsheets, word processors and communications packages. Users have security over their data as well, SPI said, as they can prevent access by simply opening a window and turning a check box on or off.

WindowBase retails for \$495, but SPI has announced it is making the product available for \$149 until the end of the month. The C Developer's Kit is optional and priced at \$695 retail.

For more information, call 619/450-1526.

— Linda Rohrbough, Newsbytes

Logitech FotoMan Digital Camera For PCs

Logitech (Fremont, Calif.), best known for computer pointing and input devices, has announced FotoMan, a portable digital camera for use with IBM PCs and compatibles. FotoMan allows users to take photographs and download them directly into Logitech's FotoTouch, a Windows-based image-editing software program.

Using FotoTouch, images can be stored in a standard image file format and used for applications such as desktop publishing, image databases or presentation graphics. FotoMan can store up to 32 images on an internal RAM chip, and does not use any type of removable media, as do some other digital camera products.

Once the images are stored, they can be transferred to a desktop, laptop, portable or notebook computer through the computer's serial port. No intermediate hardware is required. Since FotoMan is a digital camera, no special boards or frame grabbers are required, the company claims.

The average image requires 90-100 kilobytes of disk storage space, once it has been transferred to the computer. FotoTouch stores images in PCX or TIFF format. The TIFF files can be compressed or uncompressed. FotoMan uses a camcorder screw-mount lens.

Some possible examples of FotoMan's uses are real estate agents capturing the images of properties for sale, law enforcement identification photos, pictures of catalog items (which could then be included in a desktop publishing-produced catalog), and photos for personnel records.

Logitech says that FotoMan will be available in late October or early November of this year and will carry a suggested list price of \$799 including the FotoTouch image-editing software.

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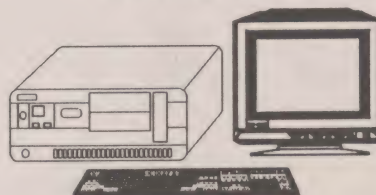
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Aristosoft President Ernest Priestly (left) shows his Wired for Sound Windows utility.

The user must provide a copy of Windows 3.0.

The FotoTouch software is an improved version of a program originally called Ansel, which is included with Logitech's ScanMan 256 hand-held gray-scale scanner. For use with FotoMan, an additional module has been added to support the specific features of the camera.

FotoMan comes standard with a camera docking unit, a built-in flash, a base unit with power supply, a six-foot serial cable to transfer images to a computer, a NiCad battery, and a neutral density filter and adaptor for use outdoors.

When the user sends in the registration card, Logitech will send out a carrying case for the camera. Optional accessories such as additional lenses are available through local camera stores. For more information, call 510/795-8500.

— Jim Mallory, Newsbytes

Aristosoft Adds Sound to Windows

Aristosoft, Inc. announced Wired For Sound, a utility that adds sound capability to Windows software using the internal PC speaker. No add-on cards are required.

Wired For Sound lets the user personalize the Windows desktop with more than 50 sound effects, musical cues and voices, including a barking dog, a cartoon bonk, a cat's meow, a doorbell and a foghorn. These can be assigned to dialog boxes, various types of alert boxes, application messages, system startup and exit.

A talking clock lets users set alarms (one-time, daily or weekly) to alert a

user to appointments, meetings or weekly reports due, using a Big Ben sound, for example. It can also speak the time in 15-minute or hourly intervals, or sound a chime.

All sounds still work while the user is in another application, when the alert message is buried, or in DOS. A Wired For Sound Dynamic Link Library is included for use with macros in such programs as Word, Excel, and Lotus 1-2-3 for Windows.

Besides being fun, Wired For Sound "also increases productivity and responsiveness because you no longer have to watch the screen constantly," said Aristosoft President Ernest Priestly. "You can use sounds to immediately alert you to problems or various operating conditions."

Customized sounds are available from the company. Aristosoft plans to offer the capability for user-created sounds in the future. Wired For Sound costs \$49 and is available now from Aristosoft at 6920 Koll Center Pkwy, Suite 211, Pleasanton, CA 94566. Telephone 510/426-5355 or (outside Calif.) 800/338-2629.

— Marguerite Zientara

Gold Disk Animation Software for Windows

Gold Disk, Inc. has announced an easy-to-use tool for creating multimedia presentations, animations, and interactive multimedia presentations.

Animation Works Interactive for Windows 3.0 lets users create and combine graphics, text and animations, and synchronize them with sound and video. Possible applications include

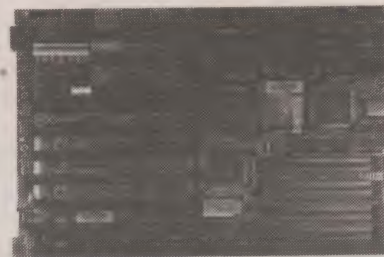
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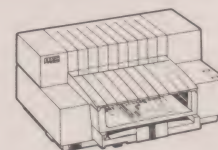


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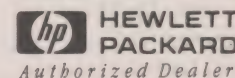
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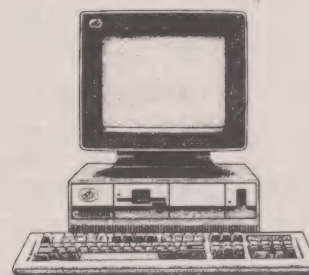
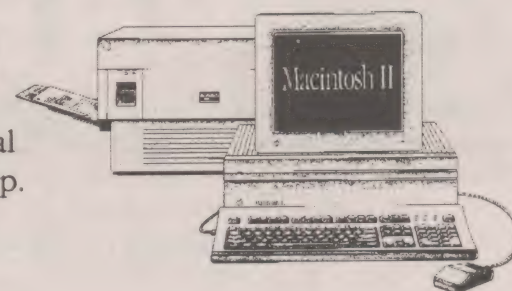
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FROM PREVIOUS PAGE

sales support presentations, interactive training and education, video production, POS (point-of-sale) and kiosk displays.

The path-based software comprises three linked modules: background editor, cel editor, and movie editor. The background editor offers a set of paint tools for creating new backgrounds or modifying imported ones, such as scanned images.

The cel editor allow users to create animated "characters," including graphics such as charts or logos, text that zooms and spins, or a cartoon-like narrator.

The movie editor orchestrates all the components. The paths that graphics and text follow in the presentation are defined by drawing lines and curves on the screen. Paths may be combined hierarchically to build complex motions easily.

Three types of sound can be added: MIDI, WAV and real-time CD playback. Any object can become a button that links to other frames or plays a range of frames, a sound, or an MCI Command (controlling external devices like VCRs and laserdisc players).

Animation Works Interactive requires Windows 3.0 or higher and MS-DOS 3.2 or higher, and is fully compatible with the awaited Microsoft Windows with Multimedia Extensions. It runs on 286 systems (386 is recommended) or IBM PS/2 with 2MB RAM,

20MB hard disk, EGA or other Windows-compatible device, and Windows-compatible mouse.

Priced at \$495, the software will ship in late September. Free unlimited technical support is offered. Gold Disk is headquartered at 5155 Spectrum Way, Unit 5, Mississauga, Ontario, Canada L4W 5A1. Telephone 416/602-4000. Its U.S. office is at 20675 S. Western Avenue, Suite 120, Torrance, CA 90501. Telephone 213/320-5080 or 800/465-3375.

— Marguerite Zientara

Ergon Technologies' Accelerator Kit Boosts Performance

Ergon Technologies, Inc. introduced its XLR8-IT Windows Accelerator Kit (\$499), said to increase by three to ten times the speed of complex graphics displays under Windows 3.0. In conjunction with that announcement, an XLR8-IT Hewlett-Packard LaserJet II/III Printer Adaptor (\$129) was introduced, said to accelerate printouts by up to ten times over standard serial or parallel interfaces.

The XLR8-IT Windows Accelerator Kit gives 286 PC users fast Windows performance without upgrading to a 386 machine. Users with 386- and 486-

based machines reportedly can also upgrade their performance. The kit reportedly provides performance equivalent to a 50MHz 486-based PC.

The XLR8-IT Windows Accelerator Kit is said to speed up all aspects of the Windows 3.0 environment, including the Windows Graphical User Interface (GUI) and laser printing of Windows-based documents.

The Windows Accelerator Kit accelerates graphics intensive applications by offloading many Windows GDI (graphical driver interface) tasks from the system CPU. The XLR8-IT Windows Accelerator board can be installed into any 16-bit slot using a menu-driven procedure.

Both XLR8-IT items are available from Ergon at P.O. Box 748, Ridgeland, MS 39158. Telephone 601/856-4968.

— Marguerite Zientara

VIP's Menu Shell Bridges Windows and DOS

VIP Software, Inc. showed off VIP Cockpit, said to be the first menu shell that lets users easily launch or execute applications, whether working in Windows, DOS, or both.

With a click of the mouse, or a key-

stroke, the user can switch back and forth between Cockpit's Windows and DOS menus. While in any Windows application, clicking on the Cockpit Icon returns the user to Cockpit's Main Menu, giving instant status indicators.

Cockpit scans the user's hard disk and builds a menu based on programs it recognizes as available to the PC. Users can customize the menu layout and personalize the user interface.

System Management tools include a security module, statistics module, e-mail module, project control module, usage tracking capability, virus detection, program pre-load, and a whereabouts message module.

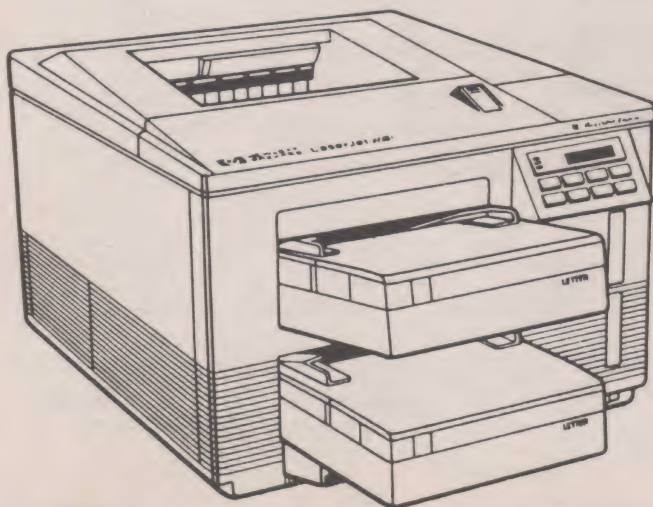
VIP Cockpit runs on IBM PC, AT, PS/2 or compatibles systems, with DOS [3.0 or above, with 256K RAM (640K RAM recommended)], and Windows 3.0 [with minimum 640K RAM (1MB RAM recommended)]. The software costs \$89 until the end of October, after which it will cost \$129. VIP Software is at One Kendall Street, Framingham, MA 01701. Telephone 508/879-9551.

— Marguerite Zientara

Charles Bermant's "Windows Chronicles" will return next issue.

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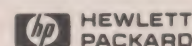
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The only thing more expensive than training is the lack of it.

By Lawrence J. Magid

Learning to use a computer can be a daunting experience. And it doesn't end once you're familiar with the hardware and your initial set of programs. There's more to learn every time you add another program or buy one of those ever recurring "upgrades."

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COVER STORY

FROM PREVIOUS PAGE

Whether through training or self-instruction, learning to use a computer — in the long run — represents a large investment, especially when you factor in the user's time. The only thing more expensive than training is the lack of it. In business, a poorly trained computer user can be a major liability to his or her company.

Learning how to use the hardware is the easy part. Mastering each new piece of software is an ongoing challenge. Some people learn best by reading manuals and practicing with the software. Sometimes even the manual isn't necessary — especially when you match an experienced user with an intuitive program. Experienced Windows, GeoWorks and Macintosh users can often master new software just by experimenting with the menus. Once you've learned one program, you have a basic idea of how others work. But knowing how to issue basic commands isn't the same as mastering the subject. Microsoft Excel, for example, has hundreds of commands and formulas. Even experienced users have plenty to learn.

Before you invest in any courses or training materials, examine the package. You might be pleasantly surprised. Just about all software programs come with manuals. There was a time when just about all manuals — written by and for engineers — were indecipherable to the average user. You'll still find a few of those, but of many of today's programs come with documentation designed with business users in mind. Some are actually quite good.

A great many programs now have online help systems that range from electronic reference cards to full-fledged tutorials. If you're stumped while using the program, just press F1 or select Help from the menu. The better programs offer "context sensitive" help which provides you with just the information you need to complete the task you're working on. Many Windows programs come with a help system that allows you to search for key words. Programs written for the new Macintosh System 7 can take advantage of that operating system's "balloon" help which displays explanations and instructions while you continue to work.

Some programs come with elaborate computer-aided tutorials — programs that provide step-by-step instructions on how to use the software.

Once you've exhausted the resources that come with the program, another

option is to buy a book. Book stores runneth over with scores of computer books. Some are designed to familiarize you with computing in general. Others focus on particular operating systems and hardware platforms such as MS-DOS and Apple Macintosh. Most hone in on a particular software package. In many cases these books are better written and easier to use than the manuals. In some cases, they're actually not as good as the documentation you get with the program. Publishers of computer books include Osborne, McGraw/Hill, Sybex,

Peachpit Press, Que, Microsoft Press, Ventana and Tab.

Other resources available include on-disk tutorials, video and audio cassettes, reference cards and keyboard "templates" and, of course, instructor-led training classes.

Computer-Aided Instruction

On-disk tutorials represent "the most popular form of computer training," according to Joel Rakow, president of American Training International (Los Angeles, Calif.). ATI, which has sold more than a million on-disk training programs, publishes software to train users on just about all major MS-DOS business applications including WordPerfect, dBase, Lotus 1-2-3, Paradox and PageMaker along with a handful of Macintosh programs. The tutorial software ranges from \$49 to \$129 with most programs costing about \$75 (suggested list price).

ATI, according to Rakow, takes a "skills-based" approach to learning. Rather than explain techniques or theory, the programs begin by telling you what keys (or mouse movements) to push to accomplish specific tasks. Once you've accomplished the task, the software explains what you've done. That, says Rakow, cuts down on learning time because "it's much easier to explain a concept once the user has experienced it." ATI programs are stand-alone. They don't require you to use or even own the actual software that you're learning. The ATI tutorial simulates the screens when necessary. As a result, it's possible to use the tutorials as a way to evaluate whether or not to buy the actual application software since you don't have to own a program to learn to use it.

Ko-Pilot, from Insight Resources, takes a different approach. The training and tutorial software is memory resident so that it works inside the program that it is helping you to learn. There are versions for WordPerfect 5.1

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- The chance to hear Brian Kernighan, co-author of *The C Programming Language*, on programming style and Al Pietrasanta, head of IBM's Software Engineering Institute for 30 years, on producing quality software
- Your choice of a dozen evening roundtables
- Invitations to some of the greatest parties this year, featuring food, drink, and the best bands in Boston—and more!

There are lots of other events for show attendees being planned as we speak, but we can't talk about them yet. So call the show office at 617/236-5800, ext. 6624 during The Week to get an up-to-the-minute schedule of all that's happening. Or better yet, just show up on Monday morning for the keynote, and take a look at the schedule for the week then!

Wait—there's more!

If you really want to get the most out of Software Development Week, it's not too late to build your own week-long program by selecting from more than 130 courses offered. Here's your chance to hear **Tom Plum** on C, **Jon Bentley** on prototyping, **Larry Constantine** on user interface design, **Richard Hale Shaw** and **Charles Petzold** on programming for Windows, **Bruce Eckel** on OOP, **Vaughan Merlyn** on CASE, and dozens of the other leaders in their field talking about what they know and do best—developing quality software.

Don't be left out

You can always wait to read about Software Development Week after it's over, but wouldn't you rather be there? Call Lisa Monson at 415/905-2414. She'll send you the complete 32-page course catalog detailing all the events of Software Development Week. Or bring this ad with you to Software Development Week for discount admission to the biggest event of the season.

You're sure to read about Software Development Week in the trade journals after it's over,
but wouldn't you rather be there while it's happening?

SPECIAL EVENTS

Sunday, September 8

7:00 p.m. - 12 midnight

Science-Fiction Film Fest Sponsored by *Programmers Journal*

Monday, September 9

6:00 p.m.

Boston Computer Society - Programming Languages SIG Peter Plamondon of Intel speaks on moving to 32-bit development.

Writing for Computer Magazines Chaired by Alan Zeichick—Yes, you too can write articles or reviews for technical magazines! Attend this session and learn where to begin.

Windows Object-Oriented Application Development Tools Panel Chaired by Richard Hale Shaw—A panel that pits Actor SmallTalk/Windows Objectworks, ToolBook, ObjectScript, KnowledgePro and Plus against each other.

C/C++ Compiler Vendor Panel Chaired by Larry O'Brien—Attend this exciting session as competing C vendors compare their products' features.

Building Visual Applications Using Visual Basic and Databases Chaired by Dorai Swamy—Visual Basic can easily be extended with custom controls to quickly and easily prototype and build commercial applications. Come learn how!

8:00 p.m.

Whitewater New Product Roll-out and Party Whitewater, the leader in Windows development tools will be making a number of important new announcements that will impact anyone interested in Windows development. After enticing you with a run-down on the best new technology of 1991, they will throw the Software Development Party-to-Remember. There will be products given away to all who attend the announcement.

Tuesday, September 10

6:00 p.m.

Technical Writing Tips Chaired by Marc Rettig—Come learn from a pro how to produce better technical reports, proposals, manuals and documentation. Get help with design, organization, drafting, editing and polishing your work.

CASE in the Real World Chaired by Warren Keuffel—Come hear a panel of CASE users and vendors debate the real world potentials and problems with CASE technology. Questions from the audience will be welcomed. Expect a high-energy discussion.

OS/2 Developer's Panel Chaired by Doug Hamilton—Come hear Richard Shaw, Charles Petzold, William Zackman, Tracy Licklider and Brian Bofit, representatives from IBM, and others intimately familiar with the future of OS/2 discuss the current status and direction of OS/2. A majority of time will be given to fielding questions from the floor.

Microsoft Product Roll-out and Cocktail Party

Microsoft New Windows Tools Demo Come learn about Microsoft's new development tools for Windows programmers! Learn about Microsoft's languages strategies and watch while they demonstrate new Windows-hosted programming technology. Their demo will be followed by a hosted reception.

8:00 p.m.

A Reprise of the Software Development '91 Party WATCOM, a leading compiler vendor will be host to an encore of the most talked about party of Software Development '91: The 32-Bit Power Party. Come hear Heavy Metal Horns, one of Boston's best bands.

Wednesday, September 11

7:00 p.m.

BCS Pen-Based Computing SIG Meeting Brian Bishop, development manager for Pen Windows at Microsoft will speak on Pen Windows Development.

7:30 p.m.

People & Systems Reception Meet and speak to the People & Systems Faculty and your peers after the keynote address.

**Many more special events are in the works, so call
the show office at (617) 236-5800, ext. 6624 during
Software Development Week to get an
up-to-the-minute rundown.**

EXHIBIT HOURS

Monday, September 9

10:00 a.m. - 7:00 p.m.

Tuesday, September 10

9:00 a.m. - 6:00 p.m.

Wednesday, September 11

9:00 a.m. - 6:00 p.m.

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and Lotus 1-2-3. Ko-Pilot doesn't have to simulate the program you're learning because it works by popping up inside the program itself. You learn Lotus or WordPerfect while you're using the actual program. Ko-Pilot's "LearnPerfect" feature, for example, teaches you all the WordPerfect keystrokes via little windows that magically pop up as you use the program.

Ko-Pilot isn't just a teacher. As its name implies, it's also able to perform tasks for you. The program is also able to carry out your WordPerfect or Lotus 1-2-3 commands for you via its own pull-down menus. The WordPerfect version has a "LearnPerfect" which teaches you the WordPerfect keystrokes as you use each Ko-Pilot feature. Insight Resources, Inc. is located at 175 Prospect Ave., Tarrytown, NY 10591. Phone: 914/332-1589.

Video-Based Training

M-USA, Anderson Soft-Teach and the Pollard Group want to turn your TV and VCR into a computer classroom. Anderson and M-USA offer videotape tutorials on most major PC programs. The Pollard Group focuses on the Macintosh platform.

M-USA tapes, which typically run for about an hour, cost \$24.95 and come with a short (approximately 48-page) booklet. "The tapes are designed to provide a conceptual overview and don't necessarily have to be viewed while you're sitting at the computer," according to producer/director Kevin Hanson. They come with a short booklet, called LogicNotes, which provides specific instructions for use at the computer. The tapes are designed primarily for new users and are priced for home and individual use. The company also offers a series of tapes for children called Computers for Kids. M-USA is located at 15806 Midway Rd., Dallas, TX 75244. Phone: 214/386-6100.

The Pollard Group's Macintosh videos, each about two hours long, are designed as complete courses with prices ranging from \$195 to \$250 per course and \$495 for a two-course set. Subjects include HyperCard, Macintosh Excel and Word, PageMaker and System 7. The Pollard Group's customers include training departments at major corporations including Chevron, Dow Chemical, KRON-TV and Wells Fargo.

Anderson Soft-Teach, which covers MS-DOS and Windows, offers one-hour videos which it bills as "complete

training systems." Kits come with a videotape, a personal training guide, a practice disk, a self-test which includes multiple choice and hands-on exercises and a certificate of completion. Prices are \$395 for a single course and \$695 for a two-course set or \$995 for a three-course set. They offer over 40 DOS and Windows applications including a two-course set on Windows 3.0 and a two-course set on Word for Windows and Excel for Windows.

The Anderson tapes, according to company President Warren Anderson, are divided into five or six short lessons. "You watch the lesson on the video and go to the computer with the book and disk to work through lessons," says Anderson. "You see it first and then you do it." Some people use the product in classrooms with the computer and video together. "For individual study, we find it's more effective to watch the video first and then return to the computer to practice the lesson. It's very hard to concentrate on two different things at the same time," Anderson added.

Pollard Group and Anderson Soft-Teach aim their products towards corporations, government agencies and educational institutions. Courses can be used to train as many people as needed. Anderson encourages its customers to buy a student pack which includes a personal training guide and self-test. Anderson Soft-Teach is located at 983 University Ave., Los Gatos, CA, 95030; 800/33-VIDEO. Pollard Group is located at 3324 Deer Hollow Dr., Danville, CA 94506. Phone: 415/736-0400.

The Ears Remember It

Audio cassette-based training doesn't offer the visual element, but it does have some advantages over its video counterpart: it's easy to set up a portable audio player next to the computer, and you don't have to take your eyes off the computer screen.

Personal Training Systems offers a series of audio cassette-based courses for the Apple Macintosh. Each course comes with a diskette and a cassette in addition to a printed manual. The company claims that the audio helps users retain more information than a video course does. Beginning, intermediate and advanced courses are available for a variety of Macintosh programs, including Microsoft Works and Excel, Word, HyperCard and Aldus

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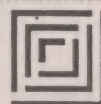
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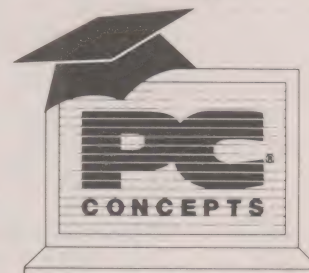
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COVER STORY



Anderson Soft-Teach's \$695, two-volume training video is one of 40 video-based training courses for DOS and Windows offered by the company.

FROM PREVIOUS PAGE

PageMaker.

FlipTrack Learning Systems courses typically include four 90-minute tapes, a quick reference guide and a data disk with files used during the course. Prices range from \$119 to \$195. In addition to courses on most major PC and Mac applications, the company also offers a Principles of Design course with nearly 16 hours of instruction. The tapes are unique in that you can turn them over, at any point, to get more detail on the lesson being covered, hence the name, "FlipTrack."

A recent FlipTrack product, How to Use Microsoft Windows 3, teaches procedures for navigating the desktop, opening and sizing windows, viewing the directory tree, and moving and copying files and directories. The course also covers the basics of Windows Write, Paintbrush, Notepad, the calculator and calendar. The product has a suggested retail price of \$119. FlipTrack Learning Systems is located at 999 Main St., Suite 200, Glen Ellyn, IL 60137. Phone: 800/222-FLIP.

Instructor-Led Training

Are you leery about using technology to teach yourself about technology? What you want is a warm human being to guide you along. Forget the tapes and disks and go for HBT — "human-based training."

Computer training companies come in all sizes, from one-person, part-time

operations to multinational corporations. Some develop their own material, others use pre-packaged materials. The size of a training company is not an indicator of its quality. There are one-person companies that, somehow, manage to remain impersonal and large companies that can be quite user-friendly. By the same token, some "mom and pop" training companies are extremely conscientious. Unfortunately, it's not always easy to evaluate the quality of a training company. If you're making a decision for a company, insist on sampling a class, or at least part of a class.

In any case, ask to look at the training materials and inquire about the training method. Are there student workbooks, and does the instructor have a teaching guide? Do you get to take home materials? How many people have been trained? Feel free to ask for references or to look at student evaluation forms.

Some training companies will display placards showing that they are "authorized" by the software companies whose products they train. While in many cases that means that they have paid a fee for that sticker, it also means that their training is certified. However, it doesn't necessarily mean that they do a better job than companies that haven't opted to apply for that status.

ExecuTrain, which is based in Atlanta, claims to be the nation's largest hands-on computer training company. Unlike many training companies, all ExecuTrain instructors are employees, and instructors are required to com-

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plete a certification program.

The company, which was founded in 1984, has franchise and company-owned offices in 27 states (including Massachusetts) and most major cities. Each classroom has about 10 PCs with one student per PC, according to Karakis. The company also provides training at corporate sites. It offers courses in most major PC-based programs including DOS, Advanced DOS, Windows, Excel, WordPerfect, and dBase IV. Most classes are completed in one full business day. Classes cost \$225 per day for an individual. Volume discounts are available. The company also offers an annual membership for \$795 which entitles an individual to unlimited access to all the company's courses. Rates for on-site training start at about \$1,000 per day. The Boston office can be reached at 508/879-3076.

Adult Education And Community Colleges

Computer education doesn't have to be expensive. Adult education pro-

grams and community colleges offer a wide variety of computer classes at a nominal fee. Unlike private training companies, which typically allow you to complete a course in one full-day or two half-day sittings, community colleges and adult education programs generally stretch out the training over a period of several weeks. (See related story, page 11.)

Training doesn't have to be expensive. Adult education programs and community colleges offer a variety of classes.

Train The Trainers

Some computer-using companies have their own in-house training departments that work with their employees. In some cases, the in-house instructors develop their own materials. In others, they teach from books. But they can also take advantage of courseware produced by professional computer training companies.

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In addition to being *Computer Currents'* Editor-at-Large and a syndicated computer columnist, Lawrence J. Magid has a doctorate in education and is one of the pioneers in the PC-training industry. □

Invest in Yourself

Increase your knowledge while meeting new people by attending the Boston Computer Society IBM PC Users' Group Workshops held Thursdays from 7 to 9 p.m. at Massachusetts Bay Community College

We offer both hands-on lab and seminar courses taught by our experienced volunteer instructor/group members. September and October Workshops:

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DOS II (Hard Disk Management)	09/19/91, 10/24/91
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Introduction to PageMaker (2 session course)	09/26/91 - 10/10/91
Introduction to Lotus 1-2-3 (2 session course)	09/26/91 - 10/10/91
WordPerfect Merge	10/17/91
WordPerfect Macros	10/24/91
Lotus 1-2-3 Databases	10/31/91

Seminar Courses

Introduction to dBASE (3 session course)	09/12/91 - 09/26/91
Introduction to Windows	09/12/91, 09/26/91
Introduction to LANs	09/12/91
Introduction to Quattro Pro	09/12/91
Introduction to Modems	09/19/91, 10/31/91
Introduction to Programming in C (6 session course)	09/19/91 - 10/31/91
Laser Printers	09/19/91
PC Tools & other Utilities	09/26/91
DOS III (Misc. DOS commands)	10/10/91
Introduction to the Personal Computer	10/10/91
dBASE Programming (3 session course)	10/10/91 - 10/24/91
DOS IV (Batch Programming)	10/17/91
Windows Tech (2 session course)	10/17/91 - 10/24/91
Introduction to Turbo Pascal (6 session course)	10/24/91 - 12/19/91
Introduction to Paradox (2 session course)	10/31/91 - 11/14/91
Introduction to SQL	10/31/91

To register for a Workshop, call the IBM office at (617)964-2547 and leave your name, phone number and the title of the Workshop you wish to attend. payment (cash or check) should be made the night of the Workshop. Prices: Hands-on Lab courses \$30 per session; Seminar courses \$25 per session.

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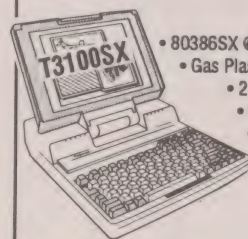
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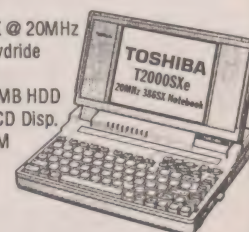
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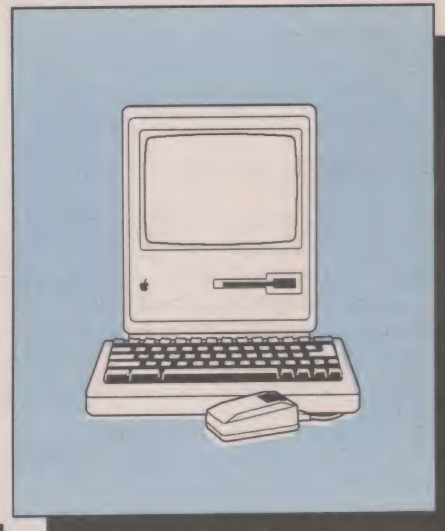
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Macfocus

News, Reviews, and Features for Macintosh Users



MAC PURIST



By Tony Bové

Sympathy for the Demo: Taking the Mystery Out of Training

The Mac has a considerable advantage over all other personal computers: it can play smooth animations with accompanying sound, without requiring extra hardware or a high-end processor. Some third-party developers put this advantage to good use by supplying interactive animated training demos with their programs. It is a pity that more developers don't produce such demos, and that animated software demos are not treated with the same respect as, say, Robert Abel's *Guernica* presentation or Voyager's *Beethoven's Ninth* disc.

I believe that a black and white, interactive, animated demo on putting together a database application would be more popular with computer users than a full-color presentation on art or history. I don't mean that computer users are culturally illiterate; my point is that software training is real problem that deserves more attention by vendors and multimedia developers.

Remember the commercial with Steven Jobs, Apple's cofounder, demonstrating how you need a pile of manuals to figure out how to use a DOS machine? Supposedly you needed only a short stack of manuals to operate a Mac. Years later, whole forests have been put to the blade to print heavy manuals for the most popular Mac programs.

Ironically, IBM and Microsoft have focused on software training in their examples of multimedia technology — regardless of the fact that the installed base of 286 and most 386 machines can't play sound or run animations smoothly.

Microsoft is currently promoting its

hypertext help system, WinHelp, which is always available when you are running Windows (it is provided with the Multimedia Extensions for Windows). Although WinHelp is mostly a text-only training system with text searching capabilities, Microsoft uses it to sing the praises of interactive multimedia. To Mac users, WinHelp looks anemic compared to the extensive help systems for some programs.

IBM has put megabucks into educational projects in an effort to promote the viability of multimedia technology in the training market with computer-based training (CBT) using PCs and videodisc players. But this technology is overkill for software training and demos — videodisc-based training requires an enormous investment in script development, video shooting crews, and video editing studio time.

Animation and sound work better for software training than video because the author has more control over what images to show. You won't be distracted by those attractive models fingering the keyboards,

SEE NEXT PAGE

UPDATE

Office Management Software Upgrade

SuperOffice (Bedford, Mass.) has released version 1.2 of its SuperOffice office management software. Among the product's improvements are support for virtually all word processors in addition to MacWrite II and Microsoft Word, spreadsheet templates using Microsoft Excel, and a month-by-month calendar overview.

SuperOffice is an easy-to-use, highly integrated single- or multi-user office management database product that ties together daily work tasks and activities into a shared database. SuperOffice recreates tasks without the use of commands or computer language.

The software combines four areas:

customer/client contacts, time planning with calendar, followups, and correspondence via mail or fax. For correspondence, SuperOffice provides a direct link between a selected customer and various pre-designed letter and fax templates.

SuperOffice works on all Macintosh systems with at least 3MB RAM, and in color on Macintosh LC and all Macintosh II models. It costs \$595 for a single user \$1,895 for up to five users and \$3,295 for up to 10 users. Versions for more users are available.

SuperOffice is located at 110 Great Road, Bedford, MA 01730. Telephone 617/275-2140.

GCC Intros 650MB and 1GB Hard Disks

GCC Technologies (Waltham, Mass.) has expanded its line of storage products to include the UltraDrive X series, featuring the 650MB UltraDrive 650X and the 1GB UltraDrive 1000X models. The models are said to be suited to file server, database management, and multimedia applications.

The X series features a One-Key System Start feature that automatically switches on the UltraDrive X and an auxiliary device when using the power-on key on the Macintosh keyboard.

The new drives include a user-

friendly control panel said to feature, among other things, solid-stateswitchable termination allowing users to interactively turn termination on or off with the push of a button.

For increased security, there is a write-protect option on the UltraDrive 1000X.

The UltraDrive 650X costs \$2,999 and the UltraDrive 1000X costs \$3,999. All UltraDrive models come with a 2-year warranty on parts and service. GCC is at 580 Winter Street, Waltham, MA 02154. Telephone 617/890-0880.

DataViz Ships MacLinkPlus 5.1

DataViz, Inc. (Trumbull, Conn.) is shipping version 5.1 of MacLinkPlus, its award-winning file translation software that now has 25 new translation combinations plus support for Apple System 7 software.

New translators include FrameMaker (MIF 2.0 & 3.0 import and export), Professional Write, and improved support for MacWrite II and Word PC. The upgrade applies to both the MacLinkPlus/Translators and the MacLinkPlus/PC products.

MacLinkPlus/Translators lets the Macintosh user access PC files in the

FDHD SuperDrive or on a file server or hard disk.

MacLinkPlus/PC comprises all software and cabling needed for bi-directional, error-free file transfer and conversion between a Macintosh and a PC, XT, PS/2, laptop, compatible, Sun or NeXT computer.

MacLinkPlus/Translators 5.1 costs \$169. MacLinkPlus/PC 5.1 costs \$199. Registered users can upgrade for \$50; recent buyers can upgrade for \$20. DataViz is at 55 Corporate Drive, Trumbull, CT 06611. Telephone 203/268-0030.

— compiled & edited by Marguerite Zientara

FROM PREVIOUS PAGE

or by the pulsing scan lines that usually appear in video footage of computer screens.

Your Mother Should Know

Steven Jobs recognized the power of animation and sound when he first unwrapped the Macintosh to the press and programmed it to demonstrate itself with sound and graphics. (My sources tell me this programming job was a major hack because the sound feature was not yet working properly.)

The first widely distributed example of an animated demo was the Macintosh Guided Tour developed for Apple by Animatrix, a design firm in Palo Alto, Calif. Now supplied with every Mac, the tour demonstrates how to use the system and lets you try Finder operations. You have full control over the action; you can suspend the animation and go to a new area, or follow the suggestions of the animation to move the mouse, click on icons, and otherwise use the system. The tour works — my mother learned how to use a Mac by following the self-paced tutorial.

Vendors such as Claris, Farallon Computing, Lotus, MacroMind, and Microsoft recognize the value in providing an interactive demo to supplement the manuals. All these vendors have shipped useful interactive tours or tutorials with their Mac programs.

For example, Claris ships FileMaker Pro with a HyperCard stack that uses animation and sound to explain how to set up various kinds of databases. MacroMind includes an extensive tour of Director's interactive authoring features, called The



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Apartment. Farallon released a CD-ROM of various product demos as well as tours with each product. And when Microsoft offered its Mac Office applications (Microsoft Word, Excel, PowerPoint, and Mail) together on a single CD-ROM disc, the company included animated documentation featuring chairman Bill Gates' voice.

Lotus, which at the time had not had any success with Mac applications, surprised the industry with its Marketplace CD-ROM disc that included animations explaining

in detail how to use the product. Marketplace represented the first use of animated tutorials as an integral part of a software product rather than as add-on presentations. The electronic documentation reduced the need to produce costly printed manuals, and the detailed descriptions cut down on support calls from users. (Marketplace was withdrawn from the market due to pressure from individual privacy groups who didn't want the disc of household names and addresses to be publicly

available.)

Still, animation and sound is not yet used for mainstream software documentation. One reason is that these presentations occupy a lot of disk space. CD-ROM has been promised as a delivery medium, but Apple has not promoted the CD-ROM medium far enough to establish an installed base, nor has the company introduced a drive that is affordable. Why should a CD-ROM drive cost hundreds of dollars more than an audio CD player?

Another reason is that the currently available animation programs are clumsy to use for capturing screen activity (even though they are better than anything on the PC side). Consequently it takes too much effort to do anything more than the simplest animated demo — the detailed tutorials are still in print form. The software industry is waiting for better tools that can be used by the writers and editors who create the manuals.

Tools For Animated Training

Animatrix used an early version of Interactive VideoWorks, now called MacroMind Director, to assemble the Mac tour. Apple licensed a version of VideoWorks for internal use. Today, MacroMind Director is the most popular tool for putting together professional-looking animated demos. Although the program provides a high level of control over animated effects, it does not provide an automatic method of capturing and displaying screen sessions. However, a function key utility (Fkey) is provided that can save a sequence of screens to a scrapbook file, and you can use other screen capture programs such as Mainstay's

SEE NEXT PAGE

MicroAge Burlington Macintosh Learning Center is Setting Trends in Training



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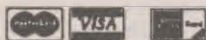
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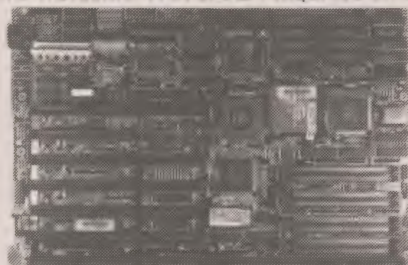
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Capture to record single PICT images of the screen.

Farallon Computing introduced the unique ScreenRecorder and MediaTracks products for recording screen activity and assembling demos. Designed to facilitate what Farallon called "casual" training, ScreenRecorder records all screen activity as a "tape" file of animation that can be played back from within HyperCard. MediaTracks lets you synchronize an audio track to ScreenRecorder tape files and assemble a complete interactive presentation. MediaTracks lets you add buttons you can click to play other tapes, to rerun segments, to pause for a certain amount of time or wait for a mouse click, to wait for the audio track to end, and so on. You can also install buttons in HyperCard stacks to play MediaTracks presentations, which is how Lotus created its Marketplace demos. ScreenRecorder is now included with MediaTracks.

Although the ScreenRecorder animations are choppy compared to those created in a professional animation program (such as MacroMind Director), they are quick and easy to assemble for "instant" training. MediaTracks and ScreenRecorder are certainly easier to use to create animation than HyperCard by itself.

Because ScreenRecorder records all screen activity as it occurs, tape files can be very large, and the objects in the images can't be edited. There are cases where ScreenRecorder has advantages, such as with a program's start-up screen, a progress indicator, or other continuously moving sequences.

However, if you use a utility such as Capture to capture single screens at a time, you can be more judicious about which screens to capture, thus saving disk space. MacroMind Director provides far more control over the animated objects, so that you can capture one screen image as a background and then animate the cursor and other objects separately.

Wouldn't it be nice to use ScreenRecorder for recording and Director for arranging? Unfortunately the best of both worlds is not available because neither ScreenRecorder nor MediaTracks can save or export a PICS file or a sequence of Scrapbook images that could be imported into Director, and Director can't read the proprietary ScreenRecorder format.

Integration between multimedia programs on the Mac is a key issue that has not yet been resolved (QuickTime offers a partial solution but won't be available until the end of this year). For example, it would be nice to be able to use Bright Star's InterFACE program to create talking heads, and Farallon's ScreenRecorder to record screen activity, and then incorporate these segments into MacroMind Director movies, with full editing control.

But today's pioneer training developer has to decide which tool to use. Director is often chosen because it offers direct manipulation of the animated objects in real time, with a timeline (the Score) that keeps track of all objects.

However, HyperCard or Aldus' SuperCard may be attractive because you can play different types of sequences, such as PICS files, Director movies, and ScreenRecorder tape files, from within a stack. However, HyperCard does not offer a timeline view of objects, and you have to be a power scripiter to effectively use sound to mask transitions, or you will have abrupt sound and visual changes between movies.

Perhaps it is too much to expect all of these programs to read each other's proprietary file formats, but it is vital that multimedia applications share the data elements of presentations — not just text and graphics, but sound, animation, and eventually video. QuickTime is a layer of system software promised by Apple that will provide essential integration services to applications so that they can share these data elements with simple Cut and Paste operations. As in desktop publishing on the Macintosh, the benefit is that you can use the right tool for the job, and not be stuck with one inadequate tool to do the entire job.

Demo Or Die

Apple's CEO John Sculley recently dampened enthusiasm for multimedia by pointing out that content publishing (on CD-ROM) is not yet a viable business, and that CD-ROM publishers should expect that the market will take time to grow. But if animated training demos could be assembled in a less costly fashion using better tools, the demos would increase the awareness of CD-ROM as a medium for electronic documentation. Animated demos of software programs could be a spark that ignites a CD-ROM buying spree.

The use of such demos in corporate settings may influence the development of other training projects. Currently, most businesses rely on instructor-led training courses and published materials to train their employees on everything from using the phone system to managing a department. Such methods can be cumbersome and expensive compared to the use of interactive multimedia tools on a Mac.

So the next time you buy a software product, show the software demo some respect and try it at least once, even if you're the type of user who never cracks open the manual. Log into CompuServe, America Online, GENie, or Connect, and download a few demos to show your friends and amaze your mother.

Director 3.0, \$995

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MediaTracks, \$295

MediaTracks Multimedia Pack, \$495

Farallon Computing, Inc.; 2000 Powell St.
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The BoCoEx Index of Used Computer Prices

How We Do the BoCoEx Index

Given the traditional modest market movement this summer, this is an opportunity to refresh our regular readers on how BCE calculates the weekly BoCoEx Index. BCE has a network of traders and brokers who access our database to buy and sell computer hardware. The BoCoEx Index is based upon the trading of real units between sellers and buyers. The forces of the market dictate the prices of trading on the Big Board, and buyer's bids and seller's asks appear in the weekly report. The final trading of the week is summarized as the closing price. If there has been noteworthy price movement during the week, that is presented in the form of dollars up or down from last week's price. Because many units traded are in volume lots and others are systems that individuals are selling with their particular idiosyncratic configuration, the economics staff of the Boston Computer Exchange analyzes each transaction and adjusts to remove the value of peripherals, software or other product that exceeds the bounds of a standard system. Similarly with volume trades, the

price is adjusted to reflect the fair market value. BoCoEx Index tells the reader the fair market price of a base configuration system as it would be normally used by a user. We assume that every system has a monitor and keyboard and our figures reflect the price of a system in normal use. While we trade systems with exotic configurations, the odd elements are deducted from the trade for the purpose of calculating the weekly BoCoEx Index.

The point is to give the computer market a stable indicator that gives readers a consistent set of figures about the changing value of computer equipment. In the service of the industry, BoCoEx Index exists so that individuals will be able to monitor the value of their equipment, and they will have a method for evaluating a system that they are selling. All hardware traded at the BCE is either used or in dealer/distributor overstock. There are no sales of brand new computers in the calculation of BoCoEx Index. Now you know!

The following prices are for the week ending August 23, 1991. ☐

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IBM AT 339 30MB	775	1000	700
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IBM PS/2 Model 50Z 30MB	1100	1200	1000
IBM PS/2 Model 55SX 60MB	1600	2200	1400
Compaq Portable III 20MB	1060	1250	1000
Compaq Portable 286 20MB	1100	1350	1000
Compaq SLT-286 40MB	1700	1900	1550
Compaq LTE-286 20MB	1300	1600	1300
Compaq LTE-286 40MB	1800	1900	1600
Compaq Deskpro 20MB	450	450	350
Compaq Deskpro 286 40MB	800	1000	700
NEC PowerMate SX + 40MB	1200	1350	1100
NEC PowerMate SX + 80MB	1400	1400	1250
Zenith SupersPort-286 20MB	900	1000	800
Zenith TurbosPort-386 40MB	1600	1900	1600
Macintosh SE 40MB	1100	1250	1050
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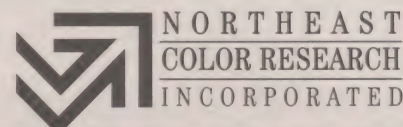
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Originally released in December 1987, the hard-cover edition of **WOMEN, TECHNOLOGY & POWER** (Amacom Books, New York, 282 pp.) is now available directly from the author at **50% OFF THE ORIGINAL PRICE**. (The author will be happy to autograph copies upon request.) Please send a check or money order for \$ 10.95 per copy (shipping & handling included), payable to the author, to:

Marguerite Zientara, P.O. Box 11, Nahant, MA 01908



By Michael Dortch

LANs, The Trainers And The Trained

"I didn't buy a car to go to the convenience store, but now that I have a car, I go to the convenience store. There are a lot of things our networks can be doing that they weren't purchased to do, like helping users. Every authorized network user ought to be able to type 'help' and see a menu that offers tutorials for every application to which I have access, as well as fully context-sensitive help." — Hale Pringle, President of NetWare Users International (Provo, Utah), a bunch of avid users of Novell's NetWare, the market-leading network operating system.

As with the stand-alone PCs that preceded them, local area networks enjoy the benefits of constantly improving technologies, both hardware and software. However, it's possible to argue that technological benefits have consistently lagged in one key area: user training.

Training — like support, of which training is an important part — becomes a complex, multifaceted issue where LANs are concerned. Training must cross the boundaries of individual hardware and software products, and help users understand and use the various components of their networks. Training must also include information about the network itself, which is its own, separate collection of hardware and software products.

LAN implementers and managers face a daunting task in development and delivery of training to network users. After all, even if adequate providers can be found, few organizations can afford the time and money it would take to remove network users and managers from their day-to-day jobs for a few days every few months, just for training and updates. Fortunately, there are ways to use the very networks that raise training and support issues to help users address them.

A Proactive Approach

The first thing worth remembering is that proactive training, no matter how much work it seems to be, is easier and more effective for users and less expensive for managers than reliance on after-the-fact support and emergency resolution. Thus, training must be addressed within the larger context of network planning and design, and

not treated as an unimportant add-on, to be truly effective. Network components must be selected and implemented with easy, effective training and support in mind.

For example, preference should be given to products that include well-designed, self-paced tutorials and online, context-sensitive help, as mentioned in the above quote from NUI's Hale Pringle. These features let users develop greater understanding of their network products at their own speeds as they need such understanding, without requiring expensive and disruptive intervention from network managers or trainers.

As it did with the graphical user interface, Apple Computer Inc.'s Macintosh leads the way in providing easy access to help, when compared with most desktop computers based on DOS or a graphical environment like Microsoft Corp.'s Windows. The latest Mac innovation is System 7's "balloon help," which allows users to point at anything on their screens and pop up a cartoon-like word balloon that tells them what they're pointing at and what it does. Balloon help is supported by most new applications.

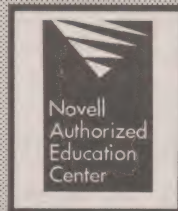
However, the Macintosh environment still does not provide sufficiently broad and deep context-sensitive help or online tutorials. This is a deficiency for which Apple bears more responsibility than IBM or Microsoft, since Apple has more control over the Mac environment and more influence with applications developers.

What To Do Now

Those responsible for LAN implementation and training must use their

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own resources to make up for those the product makers haven't yet supplied. Specifically, managers must combine vendor-provided information with network- and site-specific information users need, and they must use LANs themselves to make this information available and keep it updated. (This is a variation on the theme of user-developed documentation addressed previously in this space. Further discussion of that topic can be found in *The ABCs of LANs*, the Sybex book mentioned modestly but frequently at the end of this space.)

Most leading manufacturers of DOS and Macintosh software include some form of online help, as well as some tutorial information. However, the online versions of these elements are often dependent upon the printed manual for each application, which each and every user is highly unlikely to keep handy at his or her desk. Network managers

must work with vendors, resellers and consultants to solve this problem, perhaps by acquiring electronic equivalents of the appropriate printed volumes, or at least including references to specific chapter and page numbers in the information that is online.

There are several sources of vendor-provided information. 3Com, Banyan, Microsoft, Novell and numerous other network vendors have online forums on the CompuServe information service (call 800/848-8199 for information) that include some electronic documentation, information on updates and bugs, questions from users and answers from experts inside and outside each company. LAN managers may find it helpful to scan these forums occasionally, and to add transcribed highlights to their own online resources.

Compaq Computer Corp. (Houston, Tex.) has recently introduced TechPAQ, an online information tool for Accredited Systems Engineers working at Compaq's Specialized Dealers, who focus on network customers. TechPAQ, based on Microsoft's Windows and Lotus Development Corp.'s Notes collaboration software, provides engineers with information on integrating Compaq products with Banyan Systems' Vines, Microsoft's LAN Manager, Novell's NetWare and other network operating systems.

LAN managers should press their vendors and dealers constantly, to help

make the benefits of these and other resources available to users who need training and support. Once the appropriate information is collected and developed, more affordable network technologies can be used to make it accessible to LAN users.

One potential solution is the use of electronic bulletin board software, which can give a LAN the same kinds of file access, conferencing and messaging features supported on a CompuServe forum. The latest version of Wildcat! bulletin board software from Mustang Software Inc. (Bakersfield, Calif.), for example, has extensive file searching and sorting features, which can be used to support the online, self-paced, menu-driven tutorials NUI's Pringle wishes every network had.

Wildcat! can also be used to provide online support, via conferencing, electronic mail

or a real-time "chat mode." Wildcat! includes features which give directly connected LAN users access equal to that enjoyed by the remote users with modems most electronic bulletin boards are designed to support.

Existing public bulletin boards can also help LAN managers provide better user training. There are many freeware, shareware and public-domain programs available to augment the help facilities of the network operating systems and applications your organization now uses.

LAN training is very similar to LAN management — the need far exceeds the number of available, affordable experts. However, as with LAN management, tools are appearing that help networks help users help themselves, by distributing the needed expertise in various forms. LAN managers and implementers willing to put in sufficient initial effort can develop solutions and procedures that will give users the information and support they need to get the most out of their LANs.

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Michael Dortch is the San Francisco-based author of *The ABCs of Local Area Networks* from Sybex, Inc.

OCTOBER COVER FEATURE
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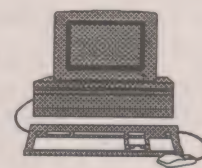
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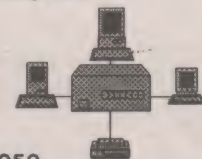
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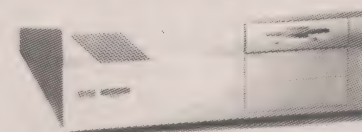
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CALENDAR

Meeting times and locations may change at the last minute; call first for confirmation.

We welcome notices of upcoming events for our Calendar. Notices must be received by the 5th of the month prior to publication. (October 5th is the deadline for our November issue.) Please send information to: Calendar, Boston Computer Currents, 4 Chrysler Road, Natick, MA 01760. Or send your notice via MCI Mail to "MZIENTARA." Or FAX to 617-593-2682.

Please Note: Boston Computer Society (BCS) listings are courtesy of the BCS. BCS events are for members only; non-members are invited to attend one meeting before joining the society. BCS headquarters are at One Kendall Square, Cambridge, MA 02139. Telephone 617/252-0600.

September 5

BCS IBM

"Jim Manzi Presents Working Together, Plus Additional Surprise Presentations." Jim Manzi, president and CEO of Lotus Development Corp., discusses strategies for "Working Together," a vision based on the idea of joining diverse information systems and environments and by connecting people to the information they need. Join us to show off Lotus 1-2-3 for Windows, Ami Pro 2.0, and Freelance for Windows. Find out about Lotus' Windows platform programs expected this fall. Also, a short presentation on the Pen-Based Notepad Computer, by Betsy Topel from the northeast division of Pen-Base Computer Solutions. 8pm, Aquinas Junior College, 15 Walnut Park, Newton, Mass. Call 617/964-2547.

September 10

Graphic Design: Images for the '90s

Northeastern University's University College sponsors this meeting for current and prospective students in the part-time adult evening undergraduate program at Northeastern. Free and open to the public. 6-8pm, 360 Huntington Avenue, Boston. Call 617/437-2416 for room location or further information.

PC-Based Data Acquisition

A two-day (Sept. 10 - 11), hands-on seminar offered by Data Translation at

its headquarters, 100 Locke Drive, Marlboro, Mass. Teaches the concept of scientific data acquisition on IBM PC/XT/AT systems to current and new users. Fee: \$1,295. Call 508/481-3700 x687.

Quark XPress

A one-day hands-on Macintosh course offered by Personal Computer Resources (PCR), 2100 Washington Street (Rt. 53 at Rt. 123), Hanover, Mass. Fee: \$225 (plus workbook at \$60). Call 617/871-5396.

September 11

BCS IBM, PC Technical Subgroup

"Software Protection and Software Restriction." Joseph Iandorio, a prominent attorney, writer and speaker specializing in intellectual property law, and Timothy McNerney, a software engineer representing the League for Programming Freedom, discuss differing perspectives on these issues. Join us for a provocative evening. 7pm, GTE Laboratories, Auditorium, 40 Sylvan Road, Waltham, Mass. Contact Bill Claff at 617/235-9505.

BCS Macintosh

"Clarix Presents..." The BCS-Mac fall lineup starts with a presentation by Clarix of its new suite of applications. Product managers demonstrate MacWrite Pro, along with Resolve, the new spreadsheet program. And a sneak look at the rest of the System 7 family. 7pm, MIT, Building 54, Room 100, Cambridge, Mass. Call 617/625-7080.

BCS Business, Accounting & Finance Subgroup

"Great American's President Gives Product Update." Roger Melanson, president of Great American Software, maker of the popular One-Write Plus Accounting System and Money Mat-

EVENT SPOTLIGHT

BCS IBM, Boston Chapter "The Changing Face of Fonts"

A representative from Bitstream presents a low-tech explanation of fonts and their usage within character-based as well as GUI (graphic user interface) environments. September 16, 7pm, BCS Center, Building 1400, One Kendall Square, Cambridge, Mass. Call 617/964-2547.

ters, demonstrates three new products — Get Paid Plus (collection letter generation), Inventory Module, and DataSave (backup utility program). Learn firsthand what a local company is doing to advance the state-of-the-art in accounting software. 7pm, BCS Center, Building 1400, One Kendall Square, Cambridge, Mass. Contact Bob Traupe at 508/881-6321.

September 12

Image Processing on PCs

A two-day (Sept. 12 - 13), hands-on seminar offered by Data Translation at its headquarters, 100 Locke Drive, Marlboro, Mass. Teaches the concept of image processing on IBM PC/XT/AT systems to current and new users. Fee: \$1,295. Call 508/481-3700 x687.

September 13

Introduction to Aldus PageMaker 4

A one-day hands-on course offered by The Support Group, Inc., Newton, Mass. Fee: \$225. Call 617/965-0300.

September 17

BCS Amiga

"Back to School With Your Amiga." Education is one area for which the Amiga is uniquely suited. Come and see some of the ways you can use it for teaching and learning. 7:30pm, MIT Building E51, Room 390, Cambridge, Mass. Contact Chuck Stern at 617/787-0798 eves.

BCS IBM, Desktop Publishing Subgroup

"CorelDRAW vs. Micrografx Designer: A User's Perspective." Park Gerald compares the strengths and weaknesses of two popular PC graphics programs. If you're shopping for a graphics program, don't miss this opportunity to get a candid appraisal from the point of view of a knowledgeable end user. 7pm, IBM offices, 188 Needham Street, Suite 230, Newton, Mass. Contact Marilyn Horn Claff at 617/235-9505.

OS/2: Comprehensive Hands-On Introduction

A four-day (Sept. 17 - 20) in-depth, hands-on introduction to OS/2 for both system support and software development applications. Presented by Learning Tree International (Los Angeles), in Boston. Fee: \$1,695. Call 800/421-8166.

September 19

BCS Networking

"Connecting PCs, Macs and Sun Workstations with TOPS." TOPS, from Sitka Corp., is the elder statesman of PC-to-Macintosh networking. In recent years, it has also supported Sun Workstations and other computer platforms to allow programs and data to be shared transparently. Representatives from Sitka talk about how TOPS works and what is in store for the future. 7:30pm, MIT, Building E512, Room 140, Cambridge, Mass.

BCS Consultants & Entrepreneurs

"Setting Up Your Home Office." What do you really need for your home office and how do you decide when to integrate new technologies to stay competitive? Join us for this discussion. 7pm, 128 Entrepreneurs' Center, 200 Fifth Avenue, Waltham. Contact Louise Sacco at 617/444-6631.

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Xerox Ventura Publisher

A two-day (Sept. 19 - 20) hands-on course offered by PC Concepts, to be held at 101 Federal Street, 9th Floor, Boston. Fee: \$450. Call 617/890-0009.

September 24

BCS Business

"Personal Computer Strategies in an Enterprise Environment." Craig Lesinski, senior systems analyst at the New England Insurance Company, discusses the concepts, approaches, and key considerations in establishing enterprise networks and evaluating components for that system. 7:30pm, 128 Entrepreneurs' Center, 200 Fifth Avenue, Waltham, Mass. Contact Jim Budwey at 617/769-9750.

BCS Hypermedia/Optical Disk Publishing

"Hypertext in Use: A Panel Discussion." A panel of experts chaired by Jeff Peoples, president of Window Books, Inc., discusses the active and expanding use of hypertext documents in business, industry and education. 7pm, MIT, Building 4, Room 270, Cambridge, Mass. Contact Greg Whalen at 508/687-1128.

Introduction to dBase IV

A one-day, hands-on seminar offered by Systemetrics, Inc., Renaissance Park, 35 Sockanosset Crossroad, Cranston, R.I. Fee: \$195. Call 401/275-2200.

September 27

Advanced WordPerfect 5.1

A one-day, hands-on course offered by Executive PC Education Centers, to be held at 230 Congress Street, Boston. Fee: \$180. Call 617/426-7240.

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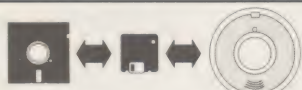
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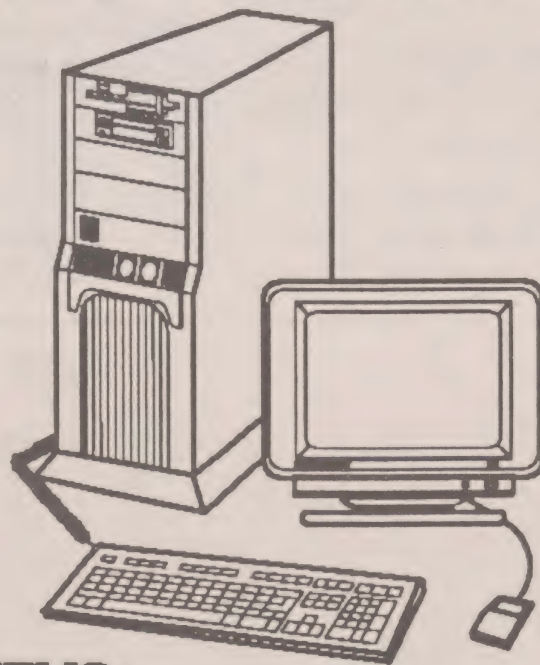
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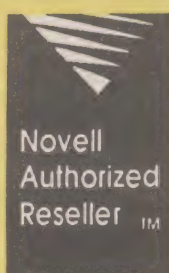
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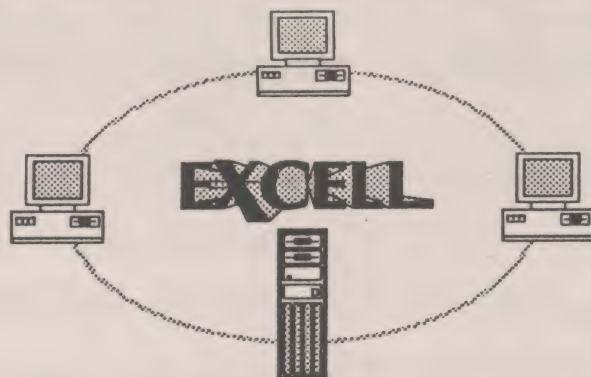
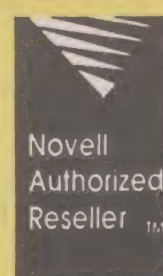
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(5.25" & 3.5" bays in parentheses)
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Part-time & full-time salesmen & technicians wanted



By Lincoln Spector

Take A Memo, Please



"DO YOU HAVE THE MICROLOBOTOMY PSYCHOLOGICAL ANALYSIS SOFTWARE UPGRADE, OR ARE YOU A NAIL-BITING, BED-WETTING, REGRESSIVE ENDOMORPH?"

Until recently, the only thing I'd ever said to my neighbor Norman was "Nice weather," and I don't think he ever caught the meaning of that. Every time I stepped out of my front door, there he was, watering his lawn. He'd turn and give me a smile and a nod, and I'd say "Nice weather." Didn't that man know there was a drought going on?

So I was surprised a few days ago when he came knocking at my door—without a garden hose. After a few vapid pleasantries, Norman broke the ice. "So you're Lincoln Spector. I hear you write for computer magazines?"

"Really? I didn't know I was that noisy about it."

He pressed on as if nothing had happened, and indeed, it hadn't. "Did you know that I'm the president and CEO of SoftPop Software?"

"No kidding?" I exclaimed with all the enthusiasm of a Mac user hearing about IBM's latest PS/Whatever. "SoftPop Software... president and CEO... in my neighborhood... wow. What do you folks make?"

He looked hurt for a moment but recovered. "We have a whole line of stuff: PopWord, PopCalc, PopN-J. Sure you haven't heard of us?"

I remembered the company now. No wonder he was living in my neighborhood. "Well, that's very nice. You'll have to invite me over for a garage sale..."

"Wait a minute," he said before I could close the door. "I thought you'd be interested in an internal memo I recently circulated to my executives. Both of them just loved it; especially the janitor."

"I really don't think I..."

"C'mon, this is top secret stuff. Listen to this opening: 'Our worst nightmare is a reality.' Sheer poetry, huh?"

"Look, the puddles on your front lawn are drying out. You'd better..."

"Our worst nightmare is a reality. Multimate is outselling our word processor, RapidFile is outselling our database, and VisiCalc—a program that no one's bought in years—is outselling our spreadsheet.' How do you like it so far?"

"I..."

"Good. Our relationship with IBM—so vitally important to our survival—is in trouble. Up until six months ago, this relationship was exemplary; we made software that would run on their computers, and they made no

attempt to hurt our business. Today, all that has changed. We can only interpret Big Blue's push to promote OS/2 2.0—an operating system for which we have no software—as an attack on SoftPop Software and all that we stand for.

"Having been spurned by IBM, we are moving full speed ahead with our decision to share technology with Apple. Under a secret agreement to be announced next Comdex, Apple will allow SoftPop to use their graphic-based interface in all of our Macintosh programs, in exchange for our patented shrinkwrap technology."

"Look," I interrupted, "this is all very exciting, but..."

"Listen to this: 'Unfortunately, Apple's commitment to this relation-

ship has to be questioned. Not only have they not yet used our shrinkwrap, but neither have they sued us for look and feel.'"

"Excuse me, but how long is this memo?"

"Sixteen single-spaced pages—in a small font, at least. Here, I brought it to you on a floppy; three and a half or five and a quarter?"

"Neither. I..."

"Listen to this part: 'To remain competitive, SoftPop Software must keep up with the latest in computer technology. Such products as PopCalc X-Professional, our new spreadsheet optimized for the 486SX chip...'"

"You've optimized a spreadsheet for the 486SX?"

"Sure have," he answered, proudly;

"We've disabled the math capabilities."

"Of course."

"Now, where was I? Oh, yes, 'Such products as PopCalc X-Professional, our new spreadsheet optimized for the 486SX chip, will help us to be recognized as a true technological leader among third-tier software companies. But once we achieve this goal, we will have to retain our leadership position through vision, technological monopolies, and a willingness to use lawyers wherever other means of control fail."

"The first priority for our lawyers—as soon as we can afford them—is to start enforcing our recently-won patent on the concept of exiting a program via a menu option..."

"Look, I..."

"Not interested in that, huh? Okay, what about this. 'SoftPop Software is working on a complete buyout of Borland International. The buyout, which awaits only the okays of Borland stock holders, the Federal Trade Commission, and Phillippe Kahn, will involve an exchange of stock. For each share of Borland preferred, stockholders will receive two chickens and a cow.'"

"Can I ask you one question?" I interrupted.

"Yeah, sure."

"Why are you reading all of this to me?"

He seemed surprised. "I thought you'd be interested, writing for all those computer magazines and all."

"I don't write for any computer magazines."

He looked at me suspiciously. "Aren't you Lincoln Spector? I see your byline everywhere."

"Oh, that Lincoln Spector," I said, pretending that everything was now clear. "I'm not him. I'm the other Lincoln Spector, the tofu salesman."

"I'm very sorry," he said sincerely. "Didn't mean to trouble you. Good bye."

I shut the door and sighed. There are some advantages to having a common name.

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Lincoln Spector is the author's real name, appearing on both his driver's license and his birth certificate. An assistant editor at PC World, Lincoln can be reached via MCI mail as LSPECTOR.

Gigglebytes is a satirical column loosely based on computer industry events, trends and people. The opinions expressed in this column are the writer's and do not necessarily reflect those of Computer Currents.

Better Windows

Solve memory problems

QEMM 386 makes the most of every last 'K'. DESQview uses that memory to run multiple programs.

Multitask

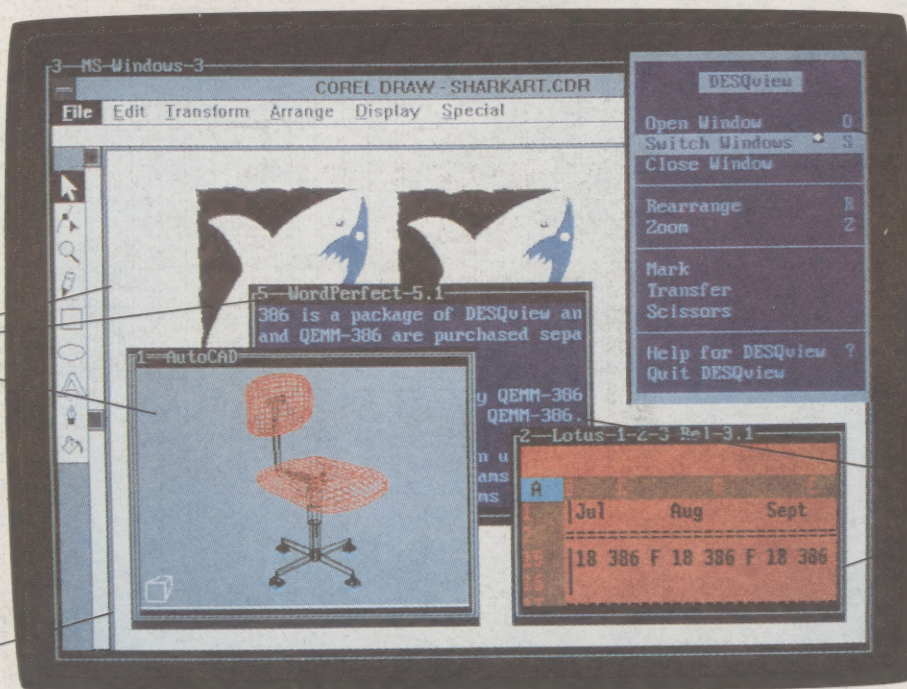
Run multiple programs side-by-side in windows. 'Background' programs can continue to run.

See text and graphics side-by-side

Reference information in your graphics program while writing your report.

Run Windows programs

DESQview even lets you run Microsoft Windows.



Easy menu access to programs and DOS services

Access programs or DOS in a window with just a few keystrokes or mouse clicks. It's that simple.

See multiple files

If your programs allow it, DESQview lets you run the same program in two or more windows. Great for comparing files

Cut and paste data

Transfer data between programs with a few keystrokes.

Handle large programs

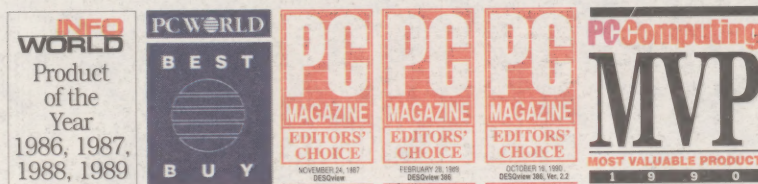
Run standard DOS programs side-by-side with DOS-extended programs like 1-2-3 Release 3.

DESQview. The Multitasking, Windowing Environment.

Once the power user's secret, DESQview has been discovered by computer knowledgeable people everywhere. Over 1,000,000 people have bought DESQview.

Multitasking; windowing, using keyboard or mouse commands, it's all easy with DESQview.

DESQview 386 2.3 lets you use your favorite DOS and DOS-extended programs in windows side-by-side on 386SX, 80386 and i486 PCs. As you can see above, you can even run Microsoft



Windows within DESQview.

DESQview 2.3 gives 8088, 8086 and 286 PCs with additional memory most of the same capabilities with surprisingly little performance trade-off.

Whatever programs you use—DOS, extended DOS or Windows—and whatever hardware you have, whether 8088 or i486 or something in between, DESQview is still the best way to get the most out of the hardware and software you own today.

DESQview. When you look into it, it's the obvious choice.

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Waltham (617) 893-0040

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Tewksbury (617) 899-4800

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